



NEC3 Engineering & Construction Contract

Between **ESKOM HOLDINGS SOC Ltd**
(Reg No. 2002/015527/30)

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

for **The Design, Build, Configure (or customise), Test, Implement, the Reliability Services Aggregator Programme (RSAP) for a period of 5 (Five) years.**

Contents:	No of pages
Part C1 Agreements & Contract Data	[•]
Part C2 Pricing Data	[•]
Part C3 Scope of Work	[•]

CONTRACT No. [Insert at award stage]

Part C1: Agreements & Contract Data

Contents:	No of pages
C1.1 Form of Offer and Acceptance	[•]
[to be inserted from Returnable Documents at award stage]	
C1.2a Contract Data provided by the <i>Employer</i>	[•]
C1.2b Contract Data provided by the <i>Contractor</i>	[•]
[to be inserted from Returnable Documents at award stage]	
C1.3 Proforma Guarantees	[•]

C1.1 Form of Offer & Acceptance

Offer

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

The Design, Build, Configure (or customise), Test, Implement, the Reliability Services Aggregator Programme for a period of 5 (Five) years running concurrently to the linked NEC TSC3 Operations and Maintenance of the RSAP services for a period of 5 years.

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

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

Options A B, C or D	The offered total of the Prices exclusive of VAT is	R [●]
Option E or F	The first forecast of the total Defined Cost plus the Fee exclusive of VAT is	R [●]
	Sub total	R [●]
	Value Added Tax @ 15% is	R [●]
	The offered total of the amount due inclusive of VAT is ¹	R [●]
	(in words) [●]	

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

Signature(s)

Name(s)

Capacity

**For the
tenderer:**

.....
(Insert name and address of organisation)

Name &
signature of
witness

Date

¹ This total is required by the *Employer* for budgeting purposes only. Actual amounts due will be assessed in terms of the *conditions of contract*.

Tenderer's CIDB registration number (if applicable)

Acceptance

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

The terms of the contract, are contained in:

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

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

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

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

Notwithstanding anything contained herein, this agreement comes into effect on the date when the tenderer receives one fully completed original copy signed between them of this document, including the Schedule of Deviations (if any).

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

Signature(s)

Name(s)

Capacity

**for the
Employer**

**Eskom Holdings SOC Limited Megawatt Park, No. 1 Maxwell Drive, Sandton,
Johannesburg.**

(Insert name and address of organisation)

Name &
signature of
witness

Date

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

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

Note:

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

No.	Subject	Details
1	[•]	[•]
2	[•]	[•]
3	[•]	[•]
4	[•]	[•]
5	[•]	[•]
6	[•]	[•]
7	[•]	[•]

By the duly authorised representatives signing this Schedule of Deviations below, the Employer and the tenderer agree to and accept this Schedule of Deviations as the only deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules, as well as any confirmation, clarification or changes to the terms of the Offer agreed by the tenderer and the Employer during this process of Offer and Acceptance.

It is expressly agreed that no other matter whether in writing, oral communication or implied during the period between the issue of the tender documents and the receipt by the tenderer of a completed signed copy of this Form shall have any meaning or effect in the contract between the parties arising from this Agreement.

For the tenderer:

For the Employer

Signature _____
 Name _____
 Capacity _____
 On behalf of _____
(Insert name and address of organisation)
 Name & signature of witness _____
 Date _____

(Insert name and address of organisation)
Eskom Holdings SOC Limited Megawatt Park, No. 1 Maxwell Drive, Sandton, Johannesburg.

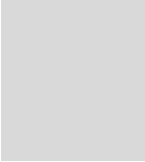
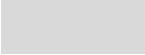

C1.2 ECC3 Contract Data

Part one - Data provided by the *Employer*

[Instructions to the contract compiler: (delete these two notes in the final draft of a contract)]

- Please read the relevant clauses in the conditions of contract before you enter data. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data.
- Some ECC3 options are always selected by Eskom Holdings SOC Ltd. The remaining ECC3 options are identified by shading in the left hand column. In the event that the option is not required select and delete the whole row. Where the following symbol is used "[•]" - data is required to be inserted relevant to the specific option selected.]

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

Clause	Statement	Data
1	General	
	The <i>conditions of contract</i> are the core clauses and the clauses for main Option	
		A: Priced contract with activity schedule
	dispute resolution Option	W1: Dispute resolution procedure
	and secondary Options	
		X1: Price adjustment for inflation
		X2: Changes in the law
		X7: Delay damages
		X13: Performance Bond
		X18: Limitation of liability
		Z: <i>Additional conditions of contract</i>
	of the NEC3 Engineering and Construction Contract, April 2013 (ECC3)	
10.1	The <i>Employer</i> is (Name):	Eskom Holdings SOC Ltd (reg no: 2002/015527/30), a state owned company incorporated in terms of the company laws of the Republic of South Africa
	Address	Registered office at Megawatt Park, Maxwell Drive, Sandton, Johannesburg
10.1	The <i>Project Manager</i> is: (Name)	TBC
	Address	[•]

	Tel	[•]
	Fax	[•]
	e-mail	[•]
10.1	The <i>Supervisor</i> is: (Name)	TBC
	Address	[•]
	Tel No.	[•]
	Fax No.	[•]
	e-mail	[•]
11.2(13)	The <i>works</i> are	The Design, Build, Configure (or customise), Test, Implement, the Reliability Services Aggregator Programme for a period of 5 (five) year.
11.2(14)	The following matters will be included in the Risk Register	Access to the Employer's half-hourly metering data Third Party Metering Providers. Site Access Employer Dependencies
11.2(15)	The <i>boundaries of the site</i> are	As per the nature and the requirements of the scope
11.2(16)	The Site Information is in	Part 4: Site Information
11.2(19)	The Works Information is in	Part 3: Scope of Work and all documents and drawings to which it makes reference.
12.2	The <i>law of the contract</i> is the law of	the Republic of South Africa
13.1	The <i>language of this contract</i> is	English
13.3	The <i>period for reply</i> is	24 hours
2	The <i>Contractor's</i> main responsibilities	Data required by this section of the core clauses is provided by the <i>Contractor</i> in Part 2 and terms in italics used in this section are identified elsewhere in this Contract Data.
3	Time	
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is	5(five) years for after the Contract start date.

11.2(9) The *key dates* and the *conditions* to be met are

Phases	Phase Duration	Sections	Key dates	Condition to be met	Activities concerned (Each • represents an activity from the schedule)	Section prerequisite/s
Development phase	50 weeks	1	6 weeks after the Contract <i>starting date</i>	RSDC and RSI Part 1 (Includes Eskom review and sign off)	<ul style="list-style-type: none"> • Engineering: Part 1 - RSDC Functional Design Specification • Engineering: Part 1 - RSI Functional Design Specification 	-
		2	12 weeks after the Contract <i>starting date</i>	RSDC and RSI Part 2 (Includes Eskom review and sign off)	<ul style="list-style-type: none"> • Engineering: Part 2 - RSDC Detailed Design Specification • Engineering: Part 2 - RSI Detailed Design Specification • RSAS Detailed Architecture Design - draft (Physical Architecture Design) 	1 1
		3	16 weeks after the Contract <i>starting date</i>	Physical Architecture Design	• RSAS Physical Architecture Design Eskom Transmission & Group IT Governance approvals	2
		4	18 weeks after the Contract <i>starting date</i>	Detailed Architecture Design	• RSAS Detailed Architecture Design - sign off (physical Architecture Design)	3
		5		Product & Infrastructure Setup	• RSAS Initial Product & Infrastructure Setup (including application setup, database population, Test/QA environment, Preprod, Production environment)	3
		6	25 weeks after the Contract <i>starting date</i>	RSDC and RSI Part 3 and Engineering Prototypes	<ul style="list-style-type: none"> • Engineering: Part 3 - RSDC System Integration and FAT, Documentation - Drawings, Instruction Manuals, Disaster Recovery plan, FAT procedures • RSDC Engineering: Prototype - Data Collector • Engineering: Part 3 - RSI System Integration and FAT, Documentation - Drawings, Instruction Manuals, FAT procedures • RSI Engineering: Prototype - RS Installation 	2 2 2
		7	35 weeks after the Contract <i>starting date</i>	RSDC and RSI Part 4 and Engineering documentation	<ul style="list-style-type: none"> • Engineering: Part 4 - RSDC Applications Installation, Testing and Commissioning • RSDC Engineering: Documentation - Application Guide, Configuration Guide, Commissioning Guide, Maintenance Guide • Engineering: Part 4 - RSI Delivery, Installation, Testing and Commissioning • RSI Engineering: Documentation - Application Guide, Configuration Guide, Commissioning Guide, Maintenance Guide 	6 6 6 6
		8	36 weeks after the Contract <i>starting date</i>	Configuration and customisation	• RSAS Configuration and customisation to meet Eskom's requirements (including security)	5
		9		Test Plan & test cases	• RSAS Test Plan & test cases/procedures (related to Eskom's requirements) review and sign off	
		10	38 weeks after the Contract <i>starting date</i>	RSDC and RSI Part 5	<ul style="list-style-type: none"> • Engineering: Part 5 - RSDC Site Acceptance Test Documentation - SAT procedures • Engineering: Part 5 - RSI Site Acceptance Test Documentation - SAT procedures 	7 7
		11	40 weeks after the Contract <i>starting date</i>	Performance test scripts	• RSAS performance test scripts development	
		12		Functional testing	• RSAS Functional testing (related to Eskom's requirements) & results sign off	8, 9

		13	42 weeks after the Contract starting date	RSAS Integration	• RSAS Integration documentation, development, testing & review and approvals - <i>Note: per interface (Integration specification review, Integration/CIM message review, code review, Integration test cases sign off, integration testing & result sign off)</i>	
		14		Performance Testing	• RSAS Performance Testing & results signoff	11
		15		Failover and Disaster Recovery	• RSAS Failover and Disaster Recovery Procedure & signoff	
		16	44 weeks after the Contract starting date	Failover and Disaster recovery testing	• RSAS Failover and Disaster recovery testing & results signoff	15
		17		Architecture Design update	• RSAS Physical Design updated to reflect any changes (as to be implemented)	8
		18		Historical Data Migration	• RSAS Historical Data Migration	
		19	46 weeks after the Contract starting date	End to end testing	• RSAP end to end testing & results signoff	18
		20	48 weeks after the Contract starting date	Pre-transfer	• RSAS Pre-transfer - Eskom & Group IT governance approvals & sign off	8, 12, 13, 14, 15, 17
		21	49 weeks after the Contract starting date	Change Release	• RSAS Change Release Approval (Group IT)	19
		22		Rollout plan	• RSAP Rollout plan	
		23	50 weeks after the Contract starting date	Go-live	• RSAP Go-live	21, 22
Implementation phase	3 months	24	3 months after completion of section 23	Implementation Phase Part A	Fully operational RSAP that includes the RSAS, RSDC and RS installations (Including existing RSIs).	
	Remainder of Contract	25		Implementation Phase Part B	As and when required, Refer to RSAP_ACTIVITY SCHEDULE - Development PSC contract	

30.1 The *access dates* are:

Part of the Site	Date
1 National control	For the duration of the contract
2 Metering Data	For the duration of the contract
3 Any other, to be arranged with <i>Employer's Agent</i>	TBC

31.1	The <i>Contractor</i> is to submit a first programme for acceptance within	2 (two) weeks of the Contract Date.
31.2	The <i>starting date</i> is	date of contract signature by the last party to the contract
32.2	The <i>Contractor</i> submits revised programmes at intervals no longer than	2 (two) weeks.
35.1	The <i>Employer</i> is not willing to take over the <i>works</i> before the Completion Date.	
4	Testing and Defects	Applicable per Section 4 of the NEC 3 ECC (April 2013).
42.2	The <i>defects date</i> is	development Phase – fifty-two (52) weeks after Completion of the Development Phase. implementation Phase (Part A and B) – fifty-two (52) weeks after Completion of site acceptance test (SAT) at each customer site.
43.2	The <i>defect correction period</i> is	Within 4 (four) weeks upon the notification of the defect.
5	Payment	
50.1	The <i>assessment interval</i> is	between the 1st and 5th day of each successive month.
51.1	The <i>currency of this contract</i> is the	South African Rand.
51.2	The period within which payments are made is	Within 30 days of receipt of a commercially and financially correct tax invoice by the Accounts Payable Department for contracts that are valued at less than R50 000 000.00 (Fifty Million Rands) and within 60 days for contracts valued at R50 000 000.00 (Fifty Million Rands) excluding VAT and above.
6	Compensation events	Applicable per Section 6 of the NEC 3 ECC (April 2013).

60.1(13) The place where weather is to be recorded is:
The established site.

The *weather measurements* to be recorded for each calendar month are,
the cumulative rainfall (mm)
the number of days with rainfall more than 10 mm
the number of days with minimum air temperature less than 0 degrees Celsius
the number of days with snow lying at 09:00 hours South African Time
and these measurements:

The *weather measurements* are supplied by
The contractor using actual weather readings from the established site

The *weather data* are the records of past *weather measurements* for each calendar month which were recorded at:
The nearest weather station of the South African Weather Service to the site•]

and which are available from:
the South African Weather Bureau and included in Annexure A to this Contract Data provided by the Employer

7	Title	Applicable per Section 7 of the NEC 3 ECC (April 2013).
8	Risks and insurance	
80.1	These are additional <i>Employer's</i> risks	as identified by the Parties from time to time and recorded in a Risk Register.
84	Insurance cover	Refer to Z clause 13.1
9	Termination	Applicable per Section 9 of the NEC 3 ECC (April 2013).
10	Data for main Option clause	
A	Priced contract with activity schedule	There is no reference to Contract Data in this Option and terms in italics are identified elsewhere in this Contract Data.
11	Data for Option W1	
W1.1	The <i>Adjudicator</i> is	the person selected from the ICE-SA Division (or its successor body) of the South African Institution of Civil Engineering Panel of Adjudicators by the Party intending to refer a dispute to him. (see www.ice-sa.org.za). If the Parties do not agree on an Adjudicator the Adjudicator will be appointed by the Arbitration Foundation of Southern Africa (AFSA).
	Address	[•]
	Tel No.	[•]

Fax No. [•]

e-mail [•]

W1.2(3)	The <i>Adjudicator nominating body</i> is:	the Chairman of ICE-SA a joint Division of the South African Institution of Civil Engineering and the London Institution of Civil Engineers. (See www.ice-sa.org.za) or its successor body.
W1.4(2)	The <i>tribunal</i> is:	arbitration.
W1.4(5)	The <i>arbitration procedure</i> is	the latest edition of Rules for the Conduct of Arbitrations published by The Association of Arbitrators (Southern Africa) or its successor body.
	The place where arbitration is to be held is	Johannesburg, South Africa.
	The person or organisation who will choose an arbitrator	
	- if the Parties cannot agree a choice or	the Chairman for the time being or his nominee
	- if the arbitration procedure does not state who selects an arbitrator, is	of the Association of Arbitrators (Southern Africa) or its successor body.

12 Data for secondary Option clauses

X1	Price adjustment for inflation	
X1.1(a)	The <i>base date</i> for indices is	A month before the closing date of the tender enquiry.
X1.1(c)	The proportions used to calculate the Price Adjustment Factor are:	The average of the index of StatsSA. The average of the index of the StatsSA, PO141 CPI Headline Table B2, for the previous 12 months (skipping the prior month due to publishing delays). Rounded-off to 2 decimal places. The escalation is effective 16 months from the base date as per the Procurement Instruction 03 of 2024.
X2	Changes in the law	of South Africa is a compensation event if it occurs after the Contract Date
X4.1	Parent company guarantee	If a parent company owns the <i>Contractor</i>, the <i>Contractor</i> gives to the <i>Employer</i> a guarantee by the parent company of the <i>Contractor's</i> performance in the form set out in the Works Information. If the guarantee was not given by the Contract Date, it is given to the <i>Employer</i> within four weeks of the Contract Date.
X7	Delay damages	
X7.1	Delay damages for Completion of the whole of the <i>works</i> are	R10 000 per day up to a limit of 10% of the contract value.
X13	Performance bond	

X13.1	The amount of the performance bond is	15% of the Contract Value of which The performance bond is renewed annually at the Contractor's cost and submitted to the Employer four weeks before the expiry of the applicable bond.
X18 Limitation of liability		
X18.1	The <i>Contractor's</i> liability to the <i>Employer</i> for indirect or consequential loss is limited to:	The sum of the loss as a result of any action arising by any negligent act by any person under the contractor's employ or any person performing work under the direct supervision of the contractor. For any other indirect or consequential loss not as a result of the contractor's employees or parties associated to the contractor then the liability is 0 (zero) Rand.
X18.2	For any one event, the <i>Contractor's</i> liability to the <i>Employer</i> for loss of or damage to the <i>Employer's</i> property is limited to:	the amount of the deductibles relevant to the event
X18.3	The <i>Contractor's</i> liability for Defects due to his design which are not listed on the Defects Certificate is limited to	The greater of: the total of the Prices at the Contract Date and the amounts excluded and unrecoverable from the <i>Employer's</i> assets policy for correcting the Defect (other than the resulting physical damage which is not excluded) plus the applicable deductible as at contract date.
X18.4	The <i>Contractor's</i> total liability to the <i>Employer</i> for all matters arising under or in connection with this contract, other than excluded matters, is limited to:	the total of the Prices other than for the additional excluded matters. The <i>Contractor's</i> total liability for the additional excluded matters is not limited. The additional excluded matters are amounts for which the <i>Contractor</i> is liable under this contract for <ul style="list-style-type: none"> • Defects due to his design which arise before the Defects Certificate is issued, • Defects due to manufacture and fabrication outside the Site, • loss of or damage to property (other than the <i>works</i>, Plant and Materials), • death of or injury to a person and • infringement of an intellectual property right.
X18.5	The <i>end of liability date</i> is	(i) 2 (two) years after the <i>defects date</i> for latent Defects and (ii) the date on which the liability in question prescribes in accordance with the Prescription Act No. 68 of 1969 (as amended or in terms of any replacement legislation) for any other matter.

A latent Defect is a Defect which would not have been discovered on reasonable inspection by the *Employer* or the *Supervisor* before the *defects date*, without requiring any inspection not ordinarily carried out by the *Employer* or the *Supervisor* during that period. If the *Employer* or the *Supervisor* do undertake any inspection over and above the reasonable inspection, this does not place a greater responsibility on the *Employer* or the *Supervisor* to have discovered the Defect.

Z The *Additional conditions of contract* are Z1 to Z15 always apply.

Z1 Cession delegation and assignment

- Z1.1 The *Contractor* does not cede, delegate or assign any of its rights or obligations to any person without the written consent of the *Employer*.
- Z1.2 Notwithstanding the above, the *Employer* may on written notice to the *Contractor* cede and delegate its rights and obligations under this contract to any of its subsidiaries or any of its present divisions or operations which may be converted into separate legal entities as a result of the restructuring of the Electricity Supply Industry.

Z2 Joint ventures

- Z2.1 If the *Contractor* constitutes a joint venture, consortium or other unincorporated grouping of two or more persons or organisations then these persons or organisations are deemed to be jointly and severally liable to the *Employer* for the performance of this contract.
- Z2.2 Unless already notified to the *Employer*, the persons or organisations notify the *Project Manager* within two weeks of the Contract Date of the key person who has the authority to bind the *Contractor* on their behalf.
- Z2.3 The *Contractor* does not alter the composition of the joint venture, consortium or other unincorporated grouping of two or more persons without the consent of the *Employer* having been given to the *Contractor* in writing.

Z3 Change of Broad Based Black Economic Empowerment (B-BBEE) status

- Z3.1 Where a change in the *Contractor's* legal status, ownership or any other change to his business composition or business dealings results in a change to the *Contractor's* B-BBEE status, the *Contractor* notifies the *Employer* within seven days of the change.
- Z3.2 The *Contractor* is required to submit an updated verification certificate and necessary supporting documentation confirming the change in his B-BBEE status to the *Project Manager* within thirty days of the notification or as otherwise instructed by the *Project Manager*.
- Z3.3 Where, as a result, the *Contractor's* B-BBEE status has decreased since the Contract Date the *Employer* may either re-negotiate this contract or alternatively, terminate the *Contractor's* obligation to Provide the Works.
- Z3.4 Failure by the *Contractor* to notify the *Employer* of a change in its B-BBEE status may constitute a reason for termination. If the *Employer* terminates in terms of this clause, the procedures on termination are P1, P2 and P3 as stated in clause 92, and the amount due is A1 and A3 as stated in clause 93.

Z4 Confidentiality

- Z4.1 The *Contractor* does not disclose or make any information arising from or in connection with this contract available to Others. This undertaking does not, however, apply to information which at the time of disclosure or thereafter, without default on the part of the *Contractor*, enters the public domain or to information which was already in the possession of the *Contractor* at the time of disclosure (evidenced by written records in existence at that time). Should the *Contractor* disclose information to Others in terms of clause 25.1, the *Contractor* ensures that the provisions of this clause are complied with by the recipient.
- Z4.2 If the *Contractor* is uncertain about whether any such information is confidential, it is to be regarded as such until notified otherwise by the *Project Manager*.
- Z4.3 In the event that the *Contractor* is, at any time, required by law to disclose any such information which is required to be kept confidential, the *Contractor*, to the extent permitted by law prior to disclosure, notifies the *Employer* so that an appropriate protection order and/or any other action can be taken if possible, prior to any disclosure. In the event that such protective order is not, or cannot, be obtained, then the *Contractor* may disclose that portion of the information which it is required to be disclosed by law and uses reasonable efforts to obtain assurances that confidential treatment will be afforded to the information so disclosed.
- Z4.4 The taking of images (whether photographs, video footage or otherwise) of the *works* or any portion thereof, in the course of Providing the Works and after Completion, requires the prior written consent of the *Project Manager*. All rights in and to all such images vests exclusively in the *Employer*.
- Z4.5 The *Contractor* ensures that all his subcontractors abide by the undertakings in this clause.

Z5 Waiver and estoppel: Add to core clause 12.3:

- Z5.1 Any extension, concession, waiver or relaxation of any action stated in this contract by the Parties, the *Project Manager*, the *Supervisor*, or the *Adjudicator* does not constitute a waiver of rights, and does not give rise to an estoppel unless the Parties agree otherwise and confirm such agreement in writing.

Z6 Health, safety and the environment: Add to core clause 27.4

- Z6.1 The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the execution of the *works*. Without limitation the *Contractor*:
accepts that the *Employer* may appoint him as the "Principal Contractor" (as defined and provided for under the Construction Regulations 2014 (promulgated under the Occupational Health & Safety Act 85 of 1993) ("the Construction Regulations") for the Site;
warrants that the total of the Prices as at the Contract Date includes a sufficient amount for proper compliance with the Construction Regulations, all applicable health & safety laws and regulations and the health and safety rules, guidelines and procedures provided for in this contract and generally for the proper maintenance of health & safety in and about the execution of *works*; and
undertakes, in and about the execution of the *works*, to comply with the Construction Regulations and with all applicable health & safety laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.
- Z6.2 The *Contractor*, in and about the execution of the *works*, complies with all applicable environmental laws and regulations and rules, guidelines and procedures otherwise provided for under this contract and ensures that his Subcontractors, employees and others under the *Contractor's* direction and control, likewise observe and comply with the foregoing.

Z7 Provision of a Tax Invoice and interest. Add to core clause 51

- Z7.1 Within one week of receiving a payment certificate from the *Project Manager* in terms of core clause 51.1, the *Contractor* provides the *Employer* with a tax invoice in accordance with the *Employer's* procedures stated in the Works Information, showing the amount due for payment equal to that stated in the payment certificate.
- Z7.2 If the *Contractor* does not provide a tax invoice in the form and by the time required by this contract, the time by when the *Employer* is to make a payment is extended by a period equal in time to the delayed submission of the correct tax invoice. Interest due by the *Employer* in terms of core clause 51.2 is then calculated from the delayed date by when payment is to be made.
- Z7.3 The *Contractor* (if registered in South Africa in terms of the companies Act) is required to comply with the requirements of the Value Added Tax Act, no 89 of 1991 (as amended) and to include the *Employer's* VAT number 4740101508 on each invoice he submits for payment.

Z8 Notifying compensation events

- Z8.1 Delete from the last sentence in core clause 61.3, "unless the *Project Manager* should have notified the event to the *Contractor* but did not".

Z9 Employer's limitation of liability

- Z9.1 The *Employer's* liability to the *Contractor* for the *Contractor's* indirect or consequential loss is limited to R0.00 (zero Rand)
- Z9.2 The *Contractor's* entitlement under the indemnity in 83.1 is provided for in 60.1(14) and the *Employer's* liability under the indemnity is limited.

Z10 Termination: Add to core clause 91.1, at the second main bullet point, fourth sub-bullet point, after the words "against it":

- Z10.1 or had a business rescue order granted against it.

Z11 Addition to secondary Option X7 Delay damages (if applicable in this contract)

- Z11.1 If the amount due for the *Contractor's* payment of delay damages reaches the limits stated in this Contract Data for Option X7 or Options X5 and X7 used together, the *Employer* may terminate the *Contractor's* obligation to Provide the Works using the same procedures and payment on termination as those applied for reasons R1 to R15 or R18 stated in the Termination Table.

Z12 Ethics

For the purposes of this Z-clause, the following definitions apply:

Affected Party means, as the context requires, any party, irrespective of whether it is the *Contractor* or a third party, such party's employees, agents, or Subcontractors or Subcontractor's employees, or any one or more of all of these parties' relatives or friends,

Coercive Action means to harm or threaten to harm, directly or indirectly, an Affected Party or the property of an Affected Party, or to otherwise influence or attempt to influence an Affected Party to act unlawfully or illegally,

- Collusive Action** means where two or more parties co-operate to achieve an unlawful or illegal purpose, including to influence an Affected Party to act unlawfully or illegally,
- Committing Party** means, as the context requires, the *Contractor*, or any member thereof in the case of a joint venture, or its employees, agents, or Subcontractor or the Subcontractor's employees,
- Corrupt Action** means the offering, giving, taking, or soliciting, directly or indirectly, of a good or service to unlawfully or illegally influence the actions of an Affected Party,
- Fraudulent Action** means any unlawfully or illegally intentional act or omission that misleads, or attempts to mislead, an Affected Party, in order to obtain a financial or other benefit or to avoid an obligation or incurring an obligation,
- Obstructive Action** means a Committing Party unlawfully or illegally destroying, falsifying, altering or concealing information or making false statements to materially impede an investigation into allegations of Prohibited Action, and
- Prohibited Action** means any one or more of a Coercive Action, Collusive Action Corrupt Action, Fraudulent Action or Obstructive Action.

- Z12.1 A Committing Party may not take any Prohibited Action during the course of the procurement of this contract or in execution thereof.
- Z12.2 The *Employer* may terminate the *Contractor's* obligation to Provide the Services if a Committing Party has taken such Prohibited Action and the *Contractor* did not take timely and appropriate action to prevent or remedy the situation, without limiting any other rights or remedies the *Employer* has. It is not required that the Committing Party had to have been found guilty, in court or in any other similar process, of such Prohibited Action before the *Employer* can terminate the *Contractor's* obligation to Provide the Services for this reason.
- Z12.3 If the *Employer* terminates the *Contractor's* obligation to Provide the Services for this reason, the amounts due on termination are those intended in core clauses 92.1 and 92.2.
- Z12.4 A Committing Party co-operates fully with any investigation pursuant to alleged Prohibited Action. Where the *Employer* does not have a contractual bond with the Committing Party, the *Contractor* ensures that the Committing Party co-operates fully with an investigation.

Z13 Insurance

Z 13.1 Replace core clause 84 with the following:

Insurance cover 84

- 84.1** When requested by a Party, the other Party provides certificates from his insurer or broker stating that the insurances required by this contract are in force.
- 84.2** The *Contractor* provides the insurances stated in the Insurance Table A.
- 84.3** The insurances provide cover for events which are at the *Contractor's* risk from the *starting date* until the earlier of Completion and the date of the termination certificate.

INSURANCE TABLE A

Insurance against	Minimum amount of cover or minimum limit of indemnity
-------------------	---

Loss of or damage to the <i>works</i> , Plant and Materials	The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, as at Contract Date, where covered by the <i>Employer's</i> insurance
Loss of or damage to Equipment	The replacement cost
Liability for loss of or damage to property (except the <i>works</i> , Plant and Materials and Equipment) and liability for bodily injury to or death of a person (not an employee of the <i>Contractor</i>) caused by activity in connection with this contract	<u>Loss of or damage to property</u> <u>Employer's property</u> The replacement cost where not covered by the <i>Employer's</i> insurance The <i>Employer's</i> policy deductible, as at Contract Date, where covered by the <i>Employer's</i> insurance <u>Other property</u> The replacement cost <u>Bodily injury to or death of a person</u> The amount required by applicable law
Liability for death of or bodily injury to employees of the <i>Contractor</i> arising out of and in the course of their employment in connection with this contract	The amount required by the applicable law

Z 13.2

Replace core clause 87 with the following:

The *Employer* provides the insurances stated in the Insurance Table B.

INSURANCE TABLE B

Insurance against or name of policy	Minimum amount of cover or minimum of indemnity
Assets All Risk	Per the insurance policy document
Contract Works insurance	Per the insurance policy document
Environmental Liability	Per the insurance policy document
General and Public Liability	Per the insurance policy document
Transportation (Marine)	Per the insurance policy document
Motor Fleet and Mobile Plant	Per the insurance policy document
Terrorism	Per the insurance policy document
Cyber Liability	Per the insurance policy document
Nuclear Material Damage and Business Interruption	Per the insurance policy document
Nuclear Material Damage Terrorism	Per the insurance policy document

Z14 Nuclear Liability

- Z14.1 The *Employer* is the operator of the Koeberg Nuclear Power Station (KNPS), a nuclear installation, as designated by the National Nuclear Regulator of the Republic of South Africa, and is the holder of a nuclear licence in respect of the KNPS.
- Z14.2 The *Employer* is solely responsible for and indemnifies the *Contractor* or any other person against any and all liabilities which the *Contractor* or any person may incur arising out of or resulting from nuclear damage, as defined in Act 47 of 1999, save to the extent that any liabilities are incurred due to the unlawful intent of the *Contractor* or any other person or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z14.3 Subject to clause Z14.4 below, the *Employer* waives all rights of recourse, arising from the aforesaid, save to the extent that any claims arise or liability is incurred due or attributable to the unlawful intent of the *Contractor* or any other person, or the presence of the *Contractor* or that person or any property of the *Contractor* or such person at or in the KNPS or on the KNPS site, without the permission of the *Employer* or of a person acting on behalf of the *Employer*.
- Z14.4 The *Employer* does not waive its rights provided for in section 30 (7) of Act 47 of 1999, or any replacement section dealing with the same subject matter.
- Z14.5 The protection afforded by the provisions hereof shall be in effect until the KNPS is decommissioned.

Z15 Asbestos

For the purposes of this Z-clause, the following definitions apply:

AAIA	means approved asbestos inspection authority.
ACM	means asbestos containing materials.
AL	means action level, i.e. a level of 50% of the OEL, i.e. 0.1 regulated asbestos fibres per ml of air measured over a 4 hour period. The value at which proactive actions is required in order to control asbestos exposure to prevent exceeding the OEL.
Ambient Air	means breathable air in area of work with specific reference to breathing zone, which is defined to be a virtual area within a radius of approximately 30cm from the nose inlet.
Compliance Monitoring	means compliance sampling used to assess whether or not the personal exposure of workers to regulated asbestos fibres is in compliance with the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.
OEL	means occupational exposure limit.
Parallel Measurements	means measurements performed in parallel, yet separately, to existing measurements to verify validity of results.
Safe Levels	means airborne asbestos exposure levels conforming to the Standard's requirements for safe processing, handling, storing, disposal and phase-out of asbestos and asbestos containing material, equipment and articles.

Standard means the *Employer's* Asbestos Standard 32-303: Requirements for Safe Processing, Handling, Storing, Disposal and Phase-out of Asbestos and Asbestos Containing Material, Equipment and Articles.

SANAS means the South African National Accreditation System.

TWA means the average exposure, within a given workplace, to airborne asbestos fibres, normalised to the baseline of a 4 hour continuous period, also applicable to short term exposures, i.e. 10-minute TWA.

- Z15.1 The *Employer* ensures that the Ambient Air in the area where the *Contractor* will Provide the Services conforms to the acceptable prescribed South African standard for asbestos, as per the regulations published in GNR 155 of 10 February 2002, under the Occupational Health and Safety Act, 1993 (Act 85 of 1993) ("Asbestos Regulations"). The OEL for asbestos is 0.2 regulated asbestos fibres per millilitre of air as a 4-hour TWA, averaged over any continuous period of four hours, and the short term exposure limit of 0.6 regulated asbestos fibres per millilitre of air as a 10-minute TWA, averaged over any 10 minutes, measured in accordance with HSG248 and monitored according to HSG173 and OESSM.
- Z15.2 Upon written request by the *Contractor*, the *Employer* certifies that these conditions prevail. All measurements and reporting are effected by an independent, competent, and certified occupational hygiene inspection body, i.e. a SANAS accredited and Department of Employment and Labour approved AAIA. The *Contractor* may perform Parallel Measurements and related control measures at the *Contractor's* expense. For the purposes of compliance the results generated from Parallel Measurements are evaluated only against South African statutory limits as detailed in clause Z15.1. Control measures conform to the requirements stipulated in the AAIA-approved asbestos work plan.
- Z15.3 The *Employer* manages asbestos and ACM according to the Standard.
- Z15.4 In the event that any asbestos is identified while Providing the Services, a risk assessment is conducted and if so required, with reference to possible exposure to an airborne concentration of above the AL for asbestos, immediate control measures are implemented and relevant air monitoring conducted in order to declare the area safe.
- Z15.5 The *Contractor's* personnel are entitled to stop working and leave the contaminated area forthwith until such time that the area of concern is declared safe by either Compliance Monitoring or an AAIA approved control measure intervention, for example, per the emergency asbestos work plan, if applicable.
- Z15.6 The *Contractor* continues to Provide the Services, without additional control measures presented, on presentation of Safe Levels. The contractually agreed dates to Provide the Services, including the Completion Date, are adjusted accordingly. The contractually agreed dates are extended by the notification periods required by regulations 3 and 21 of the Asbestos Regulations, 2001.
- Z15.7 Any removal and disposal of asbestos, asbestos containing materials and waste, is done by a registered asbestos contractor, instructed by the *Employer* at the *Employer's* expense, and conducted in line with South African legislation.

C1.2 Contract Data

Part two - Data provided by the *Contractor*

[Instructions to the contract compiler: (delete this notes before issue to tenderers with an enquiry)

Whenever a cell is shaded in the left hand column it denotes this data is optional. If not required select and delete the whole row, otherwise insert the required Data.]

Notes to a tendering contractor:

1. Please read both the NEC3 Engineering and Construction Contract (April 2013) and the relevant parts of its Guidance Notes (ECC3-GN)² in order to understand the implications of this Data which the tenderer is required to complete. An example of the completed Data is provided on pages 156 to 158 of the ECC3 (April 2013) Guidance Notes.
2. The number of the clause which requires the data is shown in the left hand column for each statement however other clauses may also use the same data
3. Where a form field like this [] appears, data is required to be inserted relevant to the option selected. Click on the form field **once** and type in the data. Otherwise complete by hand and in ink.

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

Clause	Statement	Data
10.1	The <i>Contractor</i> is (Name): Address Tel No. Fax No.	
	The <i>subcontracted fee percentage</i> is	%
11.2(18)	The <i>working areas</i> are the Site and	
24.1	The <i>Contractor's</i> key persons are: 1 Name: Job: Responsibilities: Qualifications: Experience: 2 Name: Job Responsibilities: Qualifications: Experience:	

² Available from Engineering Contract Strategies Tel 011 803 3008, Fax 011 803 3009 or see www.ecs.co.za

		CV's (and further key persons data including CVs) are appended to Tender Schedule entitled .	
11.2(3)	The <i>completion date</i> for the whole of the <i>works</i> is		
11.2(14)	The following matters will be included in the Risk Register		
11.2(19)	The Works Information for the <i>Contractor's</i> design is in:		
31.1	The programme identified in the Contract Data is		
A	Priced contract with activity schedule		
11.2(20)	The <i>activity schedule</i> is in	(in figures) (in words), excluding VAT	
11.2(30)	The tendered total of the Prices is		
	Data for Schedules of Cost Components	<i>Note "SCC" means Schedule of Cost Components starting on page 60, and "SSCC" means Shorter Schedule of Cost Components starting on page 63 of ECC3 (April 2013).</i>	
A	Priced contract with activity schedule	Data for the Shorter Schedule of Cost Components	
41 in SSCC	The percentage for people overheads is:	%	
61 in SSCC	The hourly rates for Defined Cost of design outside the Working Areas are Note: Hourly rates are estimated 'cost to company of the employee' and not selling rates. Please insert another schedule if foreign resources may also be used	Category of employee	Hourly rate
62 in SSCC	The percentage for design overheads is	%	
63 in SSCC	The categories of design employees whose travelling expenses to and from the Working Areas are included in Defined Cost are:		

C1.3 Forms of Securities

Pro formas for Bonds & Guarantees

For use with the NEC3 Engineering & Construction Contract

[Note to contract compiler:

Once it has been decided which securities are required for this contract delete from this file the ones not required, revise the notes below accordingly and delete this note.]

The *conditions of contract* stated in the Contract Data Part 1 include the following Secondary Options:

Option X13: Performance Bond

Each of these secondary Options requires a bond or guarantee “in the form set out in the Works Information”. Pro forma documents for these bonds and guarantees are provided here for convenience but are to be treated as part of the Works Information.

The organisation providing the bond / guarantee does so by copying the pro forma document onto his letterhead without any change to the text or format and completing the required details. The completed document is then given to the *Employer* within the time stated in the contract.

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

(to be reproduced exactly as shown below on the letterhead of the Contractor's Parent Company)

Eskom Holdings SOC Ltd
Megawatt Park
Maxwell Drive
Sandton
Johannesburg

Date:

Dear Sirs

Reference No. [●] [Drafting Note: Bank reference number to be inserted]

Performance Bond – Demand Guarantee: [Drafting Note: Name of Contractor to be inserted]

Project [] Contract Reference: [Drafting Note: Contractor contract reference number to be inserted]

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

“Bank” - means [●], [●] Branch, (Registration No. [●]); [Drafting Note: Name of Bank to be inserted]

“Bank’s Address” - means [●]; [Drafting Note: Bank’s physical address to be inserted]

“Contract” – means the written agreement relating to the Project, entered into between Eskom and the Contractor, on or about the [●] day of [●] 200[●] (Contract Reference No. [.] as amended, varied, restated, novated or substituted from time to time; [Drafting Note: Signature Date and Contract reference number to be inserted])

“Contractor” – means [●] a company registered in accordance with the laws of [●] under Registration Number [●]. [Drafting Note: Name and details of Contractor to be inserted]

“Eskom” - means Eskom Holdings SOC Ltd, a company registered in accordance with the laws of the Republic of South Africa under Registration Number 2002/015527/30.

“Expiry Date” - means the date on which the Defects Certificate is issued in terms of the Contract.

“Guaranteed Sum” - means the sum of R [●] ([●] Rand);

“Project” - means [insert if applicable.].

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

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

be signed on behalf of Eskom by a Group Executive, Divisional Executive, Senior General Manager, General Manager or its delegate;

state the amount claimed (“the Demand Amount”);

state that the Demand Amount is payable to Eskom in the circumstances contemplated in the Contract.

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

is and shall be absolute provided demand is made in terms of this bond in all circumstances; and

is not, and shall not be construed to be, accessory or collateral on any basis whatsoever.

The Bank's obligations in terms of this Guarantee:

shall be restricted to the payment of money only and shall be limited to the maximum of the Guaranteed Sum;
and

shall not be discharged and compliance with any demand for payment received by the Bank in terms hereof shall not be delayed, by the fact that a dispute may exist between Eskom and the Contractor.

Eskom shall be entitled to arrange its affairs with the Contractor in any manner which it sees fit, without advising us and without affecting our liability under this Guarantee. This includes, without limitation, any extensions, indulgences, release or compromise granted to the Contractor or any variation under or to the Contract.

Should Eskom cede its rights against the Contractor to a third party where such cession is permitted under the Contract, then Eskom shall be entitled to cede to such third party the rights of Eskom under this Guarantee on written notification to the Bank of such cession.

This Guarantee:

shall expire on the Expiry Date until which time it is irrevocable;

is, save as provided for in 0 above, personal to Eskom and is neither negotiable nor transferable;

shall be returned to the Bank upon the earlier of payment of the full Guaranteed Sum or expiry hereof;

shall be regarded as a liquid document for the purpose of obtaining a court order; and

shall be governed by and construed in accordance with the law of the Republic of South Africa and shall be subject to the jurisdiction of the Courts of the Republic of South Africa.

Any claim which arises or demand for payment received after expiry date will be invalid and unenforceable.

The Bank chooses domicilium citandi et executandi for all purposes in connection with this Guarantee at the Bank's Address.

Signed at _____

Date _____

For and behalf of the Bank

Bank Signatory: _____

Bank Signatory: _____

Witness: _____

Witness: _____

Bank's seal or stamp

PART 2: PRICING DATA

ECC3 Option A

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

C2.1 Pricing assumptions: Option A

How work is priced and assessed for payment

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

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

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

Function of the Activity Schedule

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

Link to the programme

Clause 31.4 states that "The *Contractor* provides information which shows how each activity on the Activity Schedule relates to the operations on each programme which he submits for acceptance". Ideally the tendering contractor will develop a high level programme first then resource each activity and thus arrive at the lump sum price for that activity both of which can be entered into the *activity schedule*.

Preparing the *activity schedule*

Generally it is the tendering contractor who prepares the *activity schedule* by breaking down the work described within the Works Information into suitable activities which can be well defined, shown on a programme and priced as a lump sum.

The *Employer*, in his Instructions to Tenderers or in a Tender Schedule, may have listed some items that he requires the *Contractor* to include in his *activity schedule* and be priced accordingly.

It is assumed that in preparing his *activity schedule* the *Contractor*:

- Has taken account of the guidance given in the ECC3 Guidance Notes pages 19 and 20;
- Understands the function of the Activity Schedule and how work is priced and paid for;
- Is aware of the need to link the Activity Schedule to activities shown on his programme;
- Has listed and priced activities in the *activity schedule* which are inclusive of everything necessary and incidental to Providing the Works in accordance with the Works Information, as it was at the time of tender, as well as correct any Defects not caused by an *Employer's* risk;
- Has priced work he decides not to show as a separate activity within the Prices of other listed activities in order to fulfil the obligation to complete the *works* for the tendered total of the Prices.
- Understands there is no adjustment to the lump sum Activity Schedule price if the amount, or quantity, of work within that activity later turns out to be different to that which the *Contractor* estimated at time of tender. The only basis for a change to the Prices is as a result of a compensation event.

C2.2 the *activity schedule*

Refer to Copy of RSAP_ACTIVITY SCHEDULE - Development ECC contract Final v1_2026

PART 3: SCOPE OF WORK

Document reference	Title	No of pages
	This cover page	1
C3.1	<i>Employer's Works Information</i>	
C3.2	<i>Contractor's Works Information</i>	
	Total number of pages	

C3.1: EMPLOYER’S WORKS INFORMATION

Contents

When the document is complete, insert a ‘Table of Contents’. To do this go to: Insert, → Reference, → Index and tables → Table of Contents. Three levels and the title (but not the subtitle) may be shown if the formats used in this template are retained.

Part 3: Scope of Work	2
C3.1: Employer’s works Information	3
1 Description of the works	5
1.1 Executive overview	5
1.2 <i>Employer’s objectives and purpose of the works</i>	6
1.3 Interpretation and terminology	12
2 Management and start up.....	14
2.1 Management meetings	14
2.2 Documentation control	14
2.3 Health and safety risk management	14
2.4 Environmental constraints and management	15
2.5 Quality assurance requirements	15
2.6 Programming constraints	15
2.7 <i>Contractor’s management, supervision and key people</i>	16
2.8 Invoicing and payment	16
2.9 Insurance provided by the <i>Employer</i>	16
2.10 Contract change management	16
2.11 Provision of bonds and guarantees	16
2.12 Records of Defined Cost, payments & assessments of compensation events to be kept by the <i>Contractor</i>	17
2.13 Training workshops and technology transfer	17
3 Engineering and the Contractor’s design	17
3.1 Parts of the <i>works</i> which the <i>Contractor</i> is to design.....	17
3.2 Procedure for submission and acceptance of <i>Contractor’s</i> design	17
3.3 Other requirements of the <i>Contractor’s</i> design.....	18
3.4 Use of <i>Contractor’s</i> design	18
3.5 Design of Equipment.....	18
3.6 Equipment required to be included in the <i>works</i>	18
3.7 As-built drawings, operating manuals and maintenance schedules.....	18
4 Procurement	18
4.1 People	18
4.1.1 Minimum requirements of people employed on the Site.....	18
4.1.2 BBBEE and preferencing scheme	18
4.2 Subcontracting	19

4.2.1	Preferred subcontractors.....	19
4.2.2	Subcontract documentation, and assessment of subcontract tenders	19
4.2.3	Limitations on subcontracting	20
4.3	Plant and Materials	20
4.3.1	Plant & Materials provided “free issue” by the <i>Employer</i>	20
4.3.2	<i>Contractor’s</i> procurement of Plant and Materials	20
4.3.3	Spares and consumables.....	20
4.4	Tests and inspections before delivery	20
4.5	Marking Plant and Materials outside the Working Areas	20
4.6	<i>Contractor’s</i> Equipment (including temporary works).....	20
4.7	Cataloguing requirements.....	20
5	Construction.....	21
5.1	Temporary works, Site services & construction constraints	21
5.1.1	<i>Employer’s</i> Site entry and security control, permits, and Site regulations	21
5.1.2	Restrictions to access on Site, roads, walkways and barricades	21
5.1.3	People restrictions on Site; hours of work, conduct and records.....	21
5.1.4	Health and safety facilities on Site	21
5.1.5	Cooperating with and obtaining acceptance of Others	21
5.1.6	Publicity and progress photographs.....	21
5.1.7	<i>Contractor’s</i> Equipment.....	21
5.1.8	Equipment provided by the <i>Employer</i>	21
5.1.9	Site services and facilities	21
5.1.10	Facilities provided by the <i>Contractor</i>	22
5.1.11	Existing premises, inspection of adjoining properties and checking work of Others	22
5.1.12	Control of noise, dust, water and waste	22
5.1.13	Hook ups to existing works	22
5.2	Completion, testing, commissioning and correction of Defects	23
5.2.1	Work to be done by the Completion Date	23
5.2.2	Materials facilities and samples for tests and inspections	23
5.2.3	Commissioning.....	23
5.2.4	Start-up procedures required to put the <i>works</i> into operation.....	23
5.2.5	Take over procedures	23
5.2.6	Access given by the <i>Employer</i> for correction of Defects	23
5.2.7	Performance tests after Completion	24
5.2.8	Training and technology transfer	24
5.2.9	Operational maintenance after Completion	24
6	List of drawings.....	25
6.1	Drawings issued by the <i>Employer</i>	25
	C3.2 Contractor’s Works Information	25
	Part 4: Site Information.....	27

1. Description of the works

1.1 Executive overview

The Distribution System Operator (DSO) and System Operator (SO) are responsible for the reliability and security of the Distribution local and national electricity grids respectively, this by monitoring, controlling and operating it in a safe, economical and reliable manner.

The demand response reliability services fulfil an important role towards power system security by providing both the DSO and SO with the much-needed flexibility and reliability to manage local network constraints and maintain adequate daily operating reserves in order to cater for unforeseen circumstances that could affect the grid stability. Factors that could affect the stability of the electricity supply include:

- local network overload and constraints
- System constraints caused by severe weather and/or power line issues
- Generator malfunctions (unexpected trips – loss of multiple Generation units)
- Catered for in the normal daily operations of the SO and are economically dispatched.

The Reliability Services Aggregator Programme (RSAP) comprises broadly of the following:

- The Reliability Services Aggregator Programme (RSAP) comprises broadly of the following:
- Reliability Services Aggregator System (RSAS),
- Reliability Services Data Collector/s (RSDC),
- Reliability Services Installations (RSI),
- Various interfaces among the above,
- Services (operations and maintenance) required for the duration of the Programme.

Development and Implementation Phase:

The *Contractor* will be responsible to design, build, configure, customise, test, implement, operate (including trouble shooting and problem solving) and maintain (equipment, software etc') of the overall Reliability Services Aggregator Programme (RSAP). **This contract will be to design, build, configure, customise, test, implement for the duration of the Programme.**

Below is the high-level summary of the sections required for RSAP:

- a) Provision of an RSAS and services: A system customized, configured and maintained to meet all Eskom's requirements with a hot standby capability.
 - System must be capable of handling multiple users with various rights and a customer/participant portal with viewing and information editing rights for their respective sites only.
 - Services must include day to day operations (Enrolling Reliability Services Participants, Bidding; Scheduling; Dispatching etc.) and maintenance.
- b) Design, build, test, implement, manage, operate and maintain RSI that are installed in Participant sites (normally installed in Customer control room / Substation or the Eskom Substation feeding the Customer).
- c) Design, build, test, implement, manage, operate and maintain a RSDC hosted on a virtual server within Eskom with a hot Standby RSDC.
- d) Build required interfaces such as, retrieve customer data from specified MDMS's, "push" data to National Control's nominated server, communicate between the RSAS, RSDC and RSI etc.
- e) Provide a test environment, with RSAS, RSDC, RSI, and the necessary interfaces. Required for extensive testing before being implemented on the "Live" System.
- f) Operate and maintain the existing RSIs.
- g) Operate and maintain the existing physical RSDC located in Sunninghill.
- h) Modify/upgrade 2 existing spare RSI panels to meet new design requirements.
- i) Spares for RSI panels.
- j) The RSAP must comply with all necessary Eskom information and Cyber Security policies and standards.

RSAP will comprise of a development phase, implementation phase and operations & maintenance phase with various milestones and deadlines. This scope is for the **Development and Implementation phases**. The Operations

and Maintenance Phase in mentioned as there are overlap areas. **The Operations and Maintenance Scope is in the linked Term Services Contract (TSC).**

1.2 Employer's objectives and purpose of the works

1.2.1 Reliability Services Aggregation Programme (RSAP) high level workflow:

1.2.1.1 Reliability Services Department

- System Optimisation
- Settings changes
- Contract Change Form (CCF) System data / reports
- Validate, edit, review events
- RS Programme parameters
- Customer contracting & contract performance management

1.2.1.2 Participant

- Submit Bids
- Receive Capacity schedules
- Dispatch accept / decline
- Receive Reports
- Log issues

1.2.1.3 Data Sources for Products

- Panel on site
- Data collector
- MDMS, MV90 data or 3rd party data
- Communication to and from RSAS

1.2.1.4 System Operator

- Receive aggregated bids
- Monitor real time data for Instantaneous products
- CCF data access
- Schedule approval
- Dispatch approval
- Generate a certificate

1.2.1.5 RSAS Operator (Aggregator)

- Event validation criteria
- Generate reports and stats
- Send notifications/ reports
- Enrol participants
- Bids aggregation
- Scheduling and dispatching
- Access control/ permissions

- Access portal (Employer and participant)
- Issue management
- Day to day operations
- 24/7 helpdesk
- Generate real time system data
- RS programme customisation
- And panel design, build, test, install and maintain etc.

1.2.2 RSAP conceptual architecture

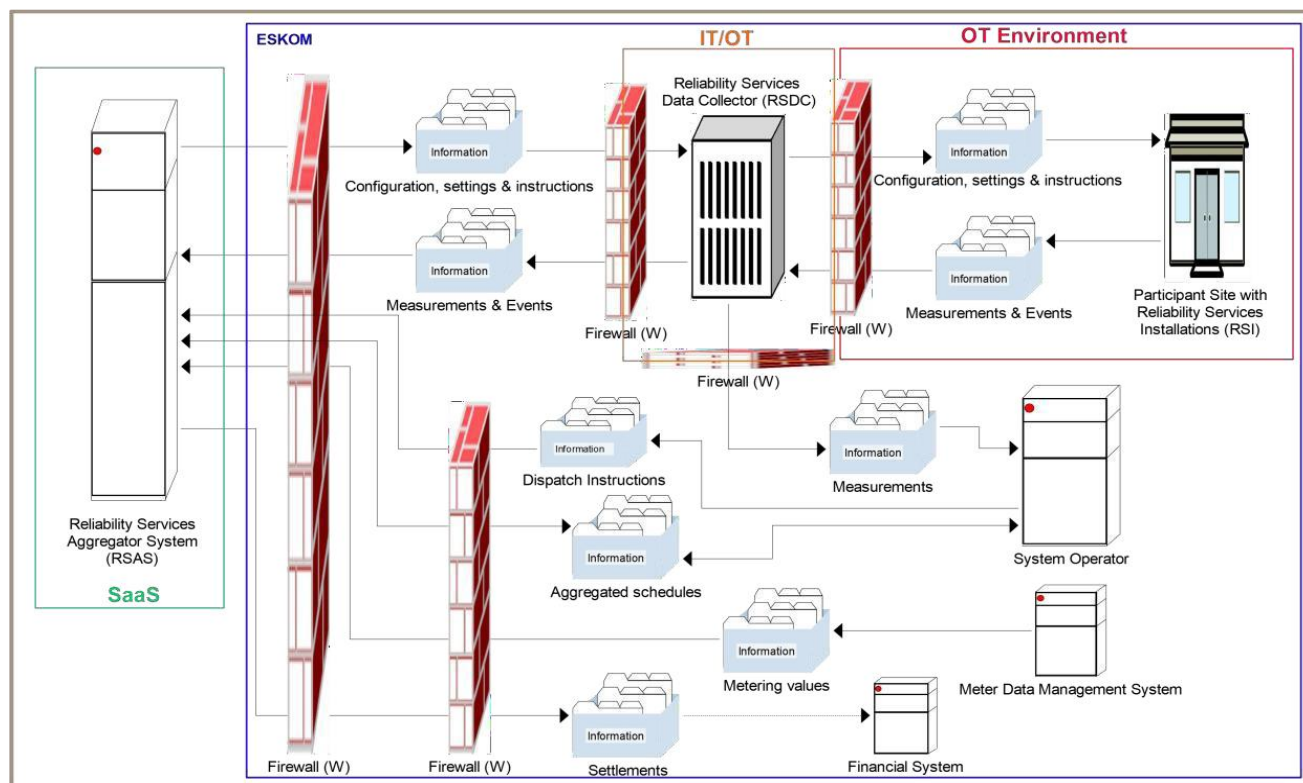


Figure 1. RSAP Conceptual Architecture

The RSAS must be capable of retrieving data from 3rd party MDMS or server in various data formats and validate data before utilisation.

1.2.3 Phases

RSAP will comprise of a development phase, implementation phase and operations & maintenance phase with various milestones and deadlines. Refer to Table 1 in the **C1 2a Data by Employer** for more detailed information which needs to be adhered to.

1.2.3.1 Development Phase:

The design and development of the new RSAP solution including RSAS, RSDC, RSI and interfaces. The outputs of the phase are Functional Design Specification, Detailed Design Specification, Product & Infrastructure Setup, Eskom IT Governance approvals, RSAS Configuration and customisation to meet Eskom’s requirements, Migration of all historical data, RSAS Functional testing (related to Eskom’s requirements), RSAS System Integration, & documentation, RSAS Integration and Performance Testing, RSDC/RSI System Integration and FAT, Documentation - Drawings, Instruction Manuals, Building of Prototypes, RSAS Failover and Disaster recovery testing, RSAS Group IT governance approvals (Pre-transfer), Delivery, Installation, Testing and Commissioning of Prototypes,

Engineering: Documentation - Application Guide, Configuration Guide, Commissioning Guide, Maintenance Guide, Site Acceptance Tests, RSAP end to end testing (including vulnerability tests and penetration tests) etc.

1.2.3.2 Implementation Phase:

The implementation of the newly developed and accepted RSAP solution in conjunction with the existing Demand Response Aggregator Programme (DRAP) Data Collector and DR Installations in a relationship as per the accepted proposal of the Contractor by the Employer. The Contractor will take over control and operation of the existing Data Collector and DR Installations during this phase in a controlled and planned manner. Priority will be given to the existing IDR and SDR Load providers. The implementation phase is dependent on the successful completion of the development phase.

1.2.4 RSAP ADDITIONAL WORK THAT MAY BE REQUIRED DURING THE CONTRACT PERIOD.

The following are examples of additional work that may be required by the employer over and above the stated scope:

- Additional RSAP customisations specific for Eskom (new reserve products etc.),
- RSAP Eskom specific new functionality,
- RSAP Eskom specific interfaces,
- Changes to processes and procedures,
- New or changing reporting requirements,
- New site equipment and site installations,
- Spares and replacement equipment,
- Recommissioning of existing sites,
- Upgrades to site equipment etc.

1.2.5 RELIABILITY SERVICES AGGREGATOR SYSTEM

Eskom has adopted a cloud first strategy for IT to enable and leverage the benefits of agility to be more responsive to changing market conditions, cost advantages and high performance. However, as per corporate (including IT) governance requirements, Eskom is obligated to ensure user safety, security and privacy as well as the protection of enterprise information assets (as detailed in the Eskom Information Security Policy).

The scope of work for the Reliability Service Aggregator System (RSAS) is the following:

Design, configuration & customization, testing, commissioning and maintenance of a RSAS that

- Is flexible, adaptable, scalable and fully auditable.
- Manage Reliability Services products based on specific product criteria
- Manage up to 500 Participants
- Manage notification of system constraints
- Manage the bidding process
- Announcement of successful bids/offers
- Schedule Participants
- Dispatch as per System Operator requirements
- Comply with the latest scheduling and dispatch rules as per South African Grid Code
- Log all calls and track workflow from start to end, record load reduction and generation decline reasons or no answer for audit and Participant queries
- Perform customer baseline (calculations)
- Measure and verify load reductions and generation outputs
- Report on any anomalies
- Generate reports
- Verify Participants invoices (if required)
- Submit verified Participant invoices to designated system for payment (if required)
- Facilitate the payment process to ensure correct and timeous payments to Participants (if required).
- Migrate all historical data to RSAS
- Store, obtain and analyses historical information.

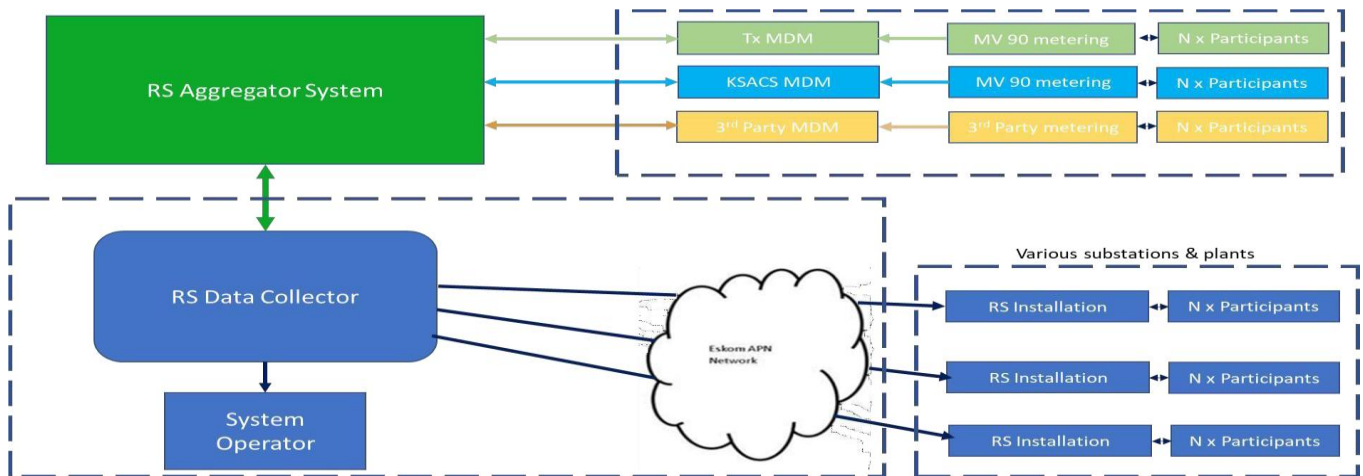
- Interfaces with other systems
 - a) Data acquisition system or MDMS or any other Systems (including third party metering interfaces) in different data formats
 - b) Provide/push real time system information to System Operator
- Comply with Eskom Information and Cyber security requirements.
- Provide Eskom with the necessary statistics regarding participation in the various reserve categories.
- RSAS Portal for Eskom staff with different levels of access and rights.
 - a) View statistics of the reserve categories and participant
 - b) Review/audit events
- Participant portal for
 - a) Capturing of bids,
 - b) viewing of schedules, relevant reports and plant information
 - c) Updating of personnel information
 - d) Requests for plant status changes
- Provide disaster recovery and hot standby capability for an availability factor of RSAS to be 99.7% - 24/7/365
- Store all system data for the duration of the contract and provide an extract of the RSAS database to Eskom. Eskom should be able to query the data in the database for its purposes.

The services to be provided: Communications Interfacings with System Operator as required.

- Training and skills transfer to users.
- Day to day Aggregator operations.
- Provide 24/7/365 helpdesk capability.
- Maintenance, support and upgrading of the RSAS
- Solution fault finding and ratification.

For detail information regarding the RSAS requirements, refer to the "RSAS Requirements" document, which must be interpreted as an extension of this document.

1.2.6 Reliability Services Data Collector and Reliability Service Installations



1.2.6.1 The scope of work for the Reliability Services Data Collector and Reliability Service Installation is the following:

- Design, testing, production, delivery, installation, commissioning and maintenance of Reliability Service Installations necessary for Reliability Service Participant participation as per Eskom's requirements. Supply of these Reliability Service Installations shall be on and as and when required basis.
- The Reliability Service Installations will do the required measurements and record the system parameters by interfacing to the local primary and secondary plant. The Reliability Service Installation will store this data until such time that it can be communicated to the Data Collector.
- The Reliability Service Installations shall provide the necessary interfaces with the Participant to indicate Events based on the dispatched Contract Schedules, system settings and required logic and formulas as dictated by their Contracts.
- Enable communications interface equipment to facilitate remote communication between the Reliability Service Installations and the Data Collector. Eskom Telecommunications are utilized to facilitate the following communication mediums:
 - a) Cellular GPRS 1 - MTN APN
 - b) Cellular GPRS 2 - Vodacom APN
 - c) Eskom Telecoms IP data network (future expansion option for communications between Eskom substations and the RSDC)
- Design, testing, production, delivery, installation, commissioning and maintenance of a Data Collector system. The Data Collector shall poll data from the Reliability Service Installations and push updated settings received from the Reliability Service Aggregator System down to these Demand Response Installations.
- The Data Collector shall be hosted on a virtual machine with a hot standby.
- Ensure a successful integration between the Data Collector and Reliability Service Aggregator System.
- Provide the following warranty:
 - a) A 10-year warranty on the Data Collector and the RS Installations. The warranty shall include the repair of all failures due to latent defects or failures of components caused by poor workmanship.
 - b) A 12-month warranty on workmanship performed by the vendor on the Data Collector/s and RS Installations.
 - c) Warranty repairs that can be completed via dial for the RS installation and RS Data Collector must be completed within 24 hours and warranty repairs that require a site visit must be completed within 72 hours of the Contractor receiving access to the impacted site.

The scope of work is for two sub-systems concatenated and connected to the RSAP, namely: Reliability Service Installations and Data Collector/s. The technical requirements for each one of these sub-systems are covered in the following standard: 240-138187946 Reliability Service Data Collector and Reliability Service Installations standard, which must be interpreted as an extension of this docu

1.2.6.2 Reliability Services Installation Operations and Maintenance (Including existing RSI's)

- RS Installation Monitoring and Reporting
- RS Installation Maintenance Management RS Installation Maintenance Planning
- RS Installation Maintenance/fault finding - OHS
- RS Installation Maintenance/fault finding Visits RS Installation Adhoc Projects - OHS
- RS Installation Adhoc Projects - Visits
- RS Installation Standby/Support
- RS Installation Technical Support
- RS Installation Advice and training for the Participant/End User
- RS Installation Spares Procurement
- RS Installation Spares Storage
- RS Installation Warranty Management
- RS Installation Disaster recovery with procedure doc
- RS Installation Sim card management and Sim testing

1.2.7 Reference documents

It is compulsory that the whole of the Specification and description of the services section is read in conjunction with:

- RSAS Requirements document.
- 240-138187946, Reliability Service Data Collector and Reliability Service Installations standard.
- Any documents/standards associated with the above two documents

1.3 Interpretation and terminology

Definition	Explanation
Bid Capacity	Is the capacity in megawatt (MW) indicated by the Participant as available for load reduction/generation during the next Day.
Bid Price	Is the price (in R/MWh) at which the Participant is willing to make energy available to EMPLOYER or the price (in R/MW) at which the Participant is willing to make demand available to EMPLOYER.
Business Day	Any day, excluding a Saturday, Sunday or official public holiday in the Republic of South Africa.
Capacity Payment	Is the payment (in R/MW/h) to the Participant by EMPLOYER for capacity scheduled by EMPLOYER for relevant products, for which capacity has been or can be successfully load reduced/generated on instruction from EMPLOYER. Such payment is made irrespective of whether or not the Participant is required or not to provide load reduction or generation on instruction from EMPLOYER.
Virtual Power Station (VPS)	A centralised software system, through which Participant's product offerings will be managed and aggregated products offered to the EMPLOYER System Operator as part of reserves.
Certified Capacity	Is the capacity in megawatt (MW), that the Participant has proved to EMPLOYER on 2 (two) or more occasions that the participant can reduce/generate as per agreed specifications, and which has subsequently been accepted and certified by EMPLOYER.
Contract Schedule	Is a schedule provided to the Participant by EMPLOYER, specifying the capacity (in MW per hour) to be available for reduction or generation during each hour of the next Day.
Curtailment Day	A day on which a Participant reduces load on request by EMPLOYER.
Customer Base Line (CBL)	A daily profile representing the amount of electricity the Participant would have consumed in each Integration Period for Weekdays and Week-end Days.
Demand Response (DR)	DR is an EMPLOYER initiative through which Participant's contract with EMPLOYER to make agreed capacity available for load reduction or generation on instruction from EMPLOYER System Operator.
DR Installation	Any equipment installed to enable the Participant to participate in a DR Program.
Energy Payment	Is the payment (in R/MWh) to the Participant by EMPLOYER for energy reduced or generated depended on the product contracted for during an Event.
EMPLOYER	Employer Holdings SOC Limited Divisions and Subsidiaries.
Event	A request by EMPLOYER to provide capacity for an applicable reserve category It can also be a request by participant to change certified capacity temporarily due to an issue that the participant is experiencing.
Integration Period	Interval metering data
Reliability Services	These are services contracted from Participants to enhance the frequency of the Interconnected Power System (IPS), these include Instantaneous Reserve, Ten-minute Reserve, Supplemental Reserve and Self-Generation
Load Reduction (LR)	It is a reduction in Participant load or consumption on instruction by EMPLOYER, measured in MW and/or MWh, over the Integration Period or a period as specifically instructed by the RSAS.
Participant	A contracted reliability services provider.
Scheduled Capacity	Is the capacity in MW that EMPLOYER requires the Participant to have available
Weekday	All days, excluding Week-end Days and public holidays
Week-end Day	Is any Saturday, Sunday, or public holiday.

The following abbreviations are used in this Works Information:

Abbreviation	Meaning given to the abbreviation
AS	Ancillary Services
CBL	Customer Base Line
DAS	Data Acquisition System
DR	Demand Response
DRD	Demand Response Department
DSO	Distribution System Operater
FFR	Fast Frequency Response
IDR	Instantaneous Demand Response
LR	Load Reduction
MDMS	Metering Data Management System
NDC	Net Declared Capacity
PSRS	Power System Reliability Services
RoCoF	Rate of Change of Frequency
RSAP	Reliability Services Aggregator Programme
RSAS	Reliability Services Aggregator System
RSDC	Reliability Services Data Collector
RSI	Reliability Services Installation
SDR	Supplement Demand Response
SFR	Supplemental Fast Response
SO	System Operator (Transmission)
SR	Supplemental Reserve
TFR	Ten-minute Fast Response
YTD	Year to Date

2. Management and start up

2.1 Management meetings

Depending on the size and complexity of the *works*, it is probably beneficial for the *Project Manager* to hold a weekly risk register meeting (Clause 16.2). This could be used to discuss safety, compensation events, subcontracting, overall co-ordination and other matters of a general nature. Separate meetings for specialist activities such as programming, engineering and design management, may also be warranted.

The following text could be used as a model for this section:

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

Title and purpose	Approximate time & interval	Location	Attendance by:
Overall contract progress and feedback	Monthly	As agreed between the Parties	Employer, Contractor and invitees
Any other meeting agreed between the Employer and Contractor	As and when required	As agreed between the Parties	Employer, Contractor and other stakeholders

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

2.2 Documentation control

All contractual communications will be in the form of properly compiled letters or forms attached to e mails and not as a message in the e mail itself. As per ISO9001 requirements.

The *Contractor* will be required to retain copies of Participant data, drawings, specifications, reports and other documents which record the services in the form stated in the Scope. Note the time period for which the Contractor is to retain such documents is the period for retention stated in the Contract Data.

2.3 Health and safety risk management

The *Contractor* undertakes to take all reasonable precautions to maintain the health and safety of persons in and about the provision of goods and execution of services. The *Contractor* shall;

- Comply with the *Employer's* lifesaving rules
- Acknowledge the *Employer's* rules and requirements
- Provide and maintain a current Health and Safety file
- After the site readiness health and safety file have been approved, the *Contractor* shall undergo the *Employer's/Participants* site induction before site access is granted.
- Ensure that there is always valid letter of good standing in the file.

Below is the list of standards applicable to this scope of work. The *Employer* provides only for the *Employer's* standards, it is the responsibility of the Contractor to source the national and international standards.

Drawing / Document number	Title
240-62196227	Lifesaving Rules
32-727	Safety, Health, Environmental and Quality policy (SHEQ) policy
ISO 9001	Quality Management Systems – Requirements

In addition, the *Contractor* must abide to all the Participants Sites, Quality, Health and Safety requirements including but not limited to an up-to-date Health and Safety file.

2.4 Environmental constraints and management

The Supplier shall comply with the environmental criteria and constraints as required by legislation.

2.5 Quality assurance requirements

2.5.1 System requirements

The Contractor will implement a Quality Management System that, as a minimum meets the requirements of ISO9001:2015 for Quality Management Systems. The Contractor will comply with the indicated requirements on tender and contract quality requirements and requirements for quality management ISO 9001 series forms of the QM-58 Standard for refurbishment, engineering, manufacturing and maintenance works at the Employer and applicable specifications, procedures and deliverables apply.

2.5.2 Information in the quality plan

The Contractor is required to provide a Quality policy statement and quality plan which complies to Employer's Quality Plan and requirements.

2.6 Programming constraints

The Contractor submits a bar chart program (in MS Project format *.MPP or Primavera P6 format *.XER) detailing how the Works are executed within the stipulated dates, including weekends and public holidays.

- The Contractor submits the program, which indicates the start, Completion Date, duration, and dependencies of each activity.
- The Contractor notifies the Employer of any changes made to the updated program.
- The Contractor submits the program within two (2) weeks after the contract award.
- The program is updated and submitted weekly to the Employer for Acceptance.
- The program indicates each activity's start date, Completion Date, and duration.
- The program is updated and submitted every week (1) weeks during the manufacturing process.
- The program is updated daily during Site implementation or sooner, depending on the urgency of the matter.
- The Contractor submits the program, reflecting the agreed shift-sensitive durations per activity.
- Activities are not longer than a shift as defined by the Employer.
- Where activities are longer than a shift, they need to be broken down into shorter milestones.

2.7 Contractor's management, supervision and key people

The *Contractor* will be required to provide the contact details (including emergency cell phone numbers) of all the staff members working on the project. It will be required that an organogram of the Contractor's project team be submitted, indicating the staff members and lines of reporting/authority and communication. The Contractor will also be required to inform the Employer on planned leave of the allocated project team and provide the abovementioned details of additional staff members that will be "standing in" when members are on leave.

2.8 Invoicing and payment

The following details shall be shown on or attached to each Invoice to show how the amount due has been assessed:

- Activity No.
- Activity
- Sub-activity
- Quantity
- Unit of measure
- Rate per unit
- TOTAL for Line Item

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

The *Contractor* shall address the tax invoice to Eskom Holdings SOC Ltd and include on each invoice the following information:

- Name and address of the *Contractor* and the *Project Manager*;
- The contract number and title;
- *Contractor's* VAT registration number;
- The *Employer's* VAT registration number 4740101508;
- Description of service provided for each item invoiced based on the Price List;
- Total amount invoiced excluding VAT, the VAT and the invoiced amount including VAT;
- (add other as required)

Add procedures for invoice submission and payment (e. g. electronic payment instructions)

2.9 Insurance provided by the Employer

Refer to Z clause 13.2

2.10 Contract change management

In the event of any changes to the contract in the form of changes to the scope, cost and time, the *Employer's* governance process will be followed. The *Contractor* is not authorised to implement any changes to the contract unless authorised in writing by the *Project Manager*.

2.11 Provision of bonds and guarantees

The form in which a bond or guarantee required by the *conditions of contract* (if any) is to be provided by the *Contractor* is given in Part 1 Agreements and Contract Data, document C1.3, Sureties.

The *Employer* may withhold payment of amounts due to the *Contractor* until the bond or guarantee required in terms of this contract has been received and accepted by the person notified to the *Contractor* by the *Project*

Manager to receive and accept such bond or guarantee. Such withholding of payment due to the *Contractor* does not affect the *Employer's* right to termination stated in this contract.

2.12 Records of Defined Cost, payments & assessments of compensation events to be kept by the Contractor

The *Contractor* shall keep records of all costs until the final account has been settled.

2.13 Training workshops and technology transfer

The obligation for technology transfer being included as part of this contract on Completion of the Works is to train Eskom Staff and/or other *Contractors* on the use of the access control and remote monitoring system, installation and commissioning, as well as training on maintenance of the system.

3. Engineering and the Contractor's design

3.1 Parts of the works which the Contractor is to design

The *Contractor* to carry out the designs and works as per the requirements of the scope.

3.2 Procedure for submission and acceptance of Contractor's design

- The *Contractor* submits all technical documentation such as bill of materials, wiring diagrams, schematics, drawings, datasheets, certificates etc. for acceptance by the *Employer* before manufacturing.
- The *Contractor* submits two hard copies plus an electronic copy of all documentation listed in the section.
- The *Contractor* is to comply with all legislated safety requirements as well as Eskom's health and safety standards.
- The *Contractor* provides all plant, equipment, materials and services needed to execute all work necessary to fulfil all requirements specified in this scope.
- The *Contractor* provides a preliminary design of the *works* for review and acceptance by the *Employer* before the commencement of manufacturing.
- The *Contractor* makes provision for the following:
 - a) All plant materials are new.
 - b) The *Contractor* installs all the associated equipment of the RSAP.
 - c) All electrical installations of 220V and above are performed by a qualified electrician.
 - d) All new electrical cabling must be certified by the *Contractor's* electrician issuing a certificate to prove that it has been tested.
 - e) The *Contractor* provides a commissioning engineer during the cold and hot commission of the completed installation. The commissioning engineer ensures all relevant tests are performed to ensure a successful handover to the *Employer*.
 - f) All existing plant interfaces are to be considered and verified during the design.
 - g) Newly installed equipment is to be labelled and codified according to the *Employer's* requirements.
 - h) Should arise all arrangement drawings, schematics, wiring diagrams, operating and maintenance manuals, plant, equipment, cabling, panels and signals utilise the coding system approved by the *Employer* to the third level of coding. The system is applied from the design stage and cross- referenced to all arrangement drawings, schematics, wiring diagrams, manuals and where practical spare parts lists/manuals.
 - i) All codes are unique and verification by the *Employer* is done before handover.

3.3 Other requirements of the *Contractor's* design **N/A**

3.4 Use of *Contractor's* design

- The *Employer* may use and copy the *Contractor's* complete design (including control logic) for any purpose connected with the construction, operation, alteration, or demolition of the *works*.
- The copyright of the *Contractor's* drawings, including the design & details shown therein, is owned by Eskom Holdings LTD.
- Third parties shall not use this drawing as a whole or in part without the written permission from Eskom Holdings LTD.

3.5 Design of Equipment

Contractor to provide the design of all associated equipment for approval by the *Project Manager*.

3.6 Equipment required to be included in the *works*

To be provided by the *Contractor*

3.7 As-built drawings, operating manuals and maintenance schedules

The *Contractor* is required to provide the necessary drawings, operating manuals, test certificates and training program details, as well as a commitment letter for providing ongoing product support.

4. Procurement

4.1 People

4.1.1 Minimum requirements of people employed on the Site

Contractor to submit the number of people and their competencies to the *Project Manager* for approval.

The *Contractor* shall make arrangements for accommodation and transportation of his/her employees. The *Contractor* shall make his own arrangements to house his employees and transports them to site in a closed vehicle specifically designed for passenger transport (bus or similar) which is in a roadworthy condition. All safety precautions shall be taken into consideration.

4.1.2 BBBEE and preferencing scheme

Eskom requests that tenderer/s submits their B-BBEE improvement or retention plan within 30 days of signing the contract. Tenderer/s are therefore requested to indicate the extent to which they will maintain (only if the respondent is a Level 1-3). Tenderer/s with a B-BBEE status level 4 at the time of contract award, shall migrate and achieve as a non-negotiable a milestone of B-BBEE Level 3 by the end of the first year of the contract and thereafter maintain their B-BBEE status level throughout the duration of the contract.

Tenderer/s with a B-BBEE recognition status of Level 5 to Level 8 or non-compliant at the time of contract award, shall migrate and achieve as a non-negotiable a milestone of Level 4 by the end of the first year of the

contract and thereafter improve at least one B-BBEE Level higher to a B-BBEE level 3 by the second anniversary of the contract.

Tenderer/s are requested to submit their B-BBEE Improvement Plan as an essential document within 30 days of signing the contract.

NB: A valid B-BBEE certificate or Sworn Affidavit is a condition for contract award, if your company's annual Total Revenue is R10 Million or less you qualify as an Exempted Micro Enterprise therefore you can submit Sworn Affidavit. If your annual Total Revenue is R50 Million or less, you qualify as Qualifying Small Enterprise and must comply with all the elements of QSE score card relevant to your sector unless an entity is at least 51% Black owned you are required to obtain a Sworn affidavit. If your Annual Total Revenue is above R50m you need to submit a Valid B-BBEE certificate

4.2 Subcontracting

4.2.1 Preferred subcontractors

N/a

4.2.2 Subcontract documentation, and assessment of subcontract tenders

Where feasible, a minimum of 30% subcontracting is applicable to contracts that are R30M and above. The beneficiaries will be EMEs and or QSEs that are 51% Black owned or more. A progress report on this requirement will be required on a monthly basis by contract management which will include invoices paid to the subcontracting company.

Tenderers shall subcontract with the following designated groups:

- an EME or QSE which is at least 51% owned by black people.
- an EME or QSE which is at least 51% owned by black people who are youth.
- an EME or QSE which is at least 51% owned by black people who are women.
- an EME or QSE which is at least 51% owned by black people with disabilities.
- an EME or QSE which is 51% owned by black people living in rural or underdeveloped area or townships.
- a cooperative which is at least 51% owned by black people.
- a EME or QSE which is at least 51% owned by black people who are military veterans.

The following documents must be submitted before contract award:

- Proof of a sub-contract agreement/s
- CSD report of subcontractor/s
- Sub-contractor/s B-BBEE certificate / sworn affidavit.

Participating tenderer/s are required to populate the sub-contracting information on the table below:

Name of contractor / Contractors	
Proposed Scope of work to be performed by sub-contractor	
% Subcontracting	
Sub-contractor BBBEE Status Level and ownership	
Contact person	
Telephone number	
E-mail address	

4.2.3 Limitations on subcontracting

A supplier awarded a contract/purchase order may not subcontract more than 25% of the value of the purchase order to any other entity that does not have an equal or higher B-BBEE status level of a contributor than the supplier concerned unless the contract is subcontracted to an EME that has the capability and ability to execute the subcontract.

4.3 Plant and Materials

4.3.1 Plant & Materials provided “free issue” by the *Employer*

The *Employer* will not provide any Plant & Materials required by the *Contractor* to perform the *works*.

4.3.2 *Contractor's* procurement of Plant and Materials

The *Contractor* shall supply all plant and materials required for providing the *works*..

4.3.3 Spares and consumables

The *Contractor* to purchase spares and consumables as part of their scope and approved by the *Project Manager*.

4.4 Tests and inspections before delivery

The *Project Manager* may request the *Contractor* to allow testing and inspections of the *plant and material* to take place prior delivery.

4.5 Marking Plant and Materials outside the Working Areas

The *Project Manager* may request the *Contractor* to indicate how the *Contractor* is to “mark” *Plant and Materials* which is outside the Working Areas if they are to be paid for before delivery to the Working Areas.

4.6 Cataloguing requirements by the *Contractor*

Should cataloguing be required the *Project Manager* shall provide the requirements

5. Construction

5.1 Temporary works, Site services & construction constraints

5.1.1 *Employer's* Site entry and security control, permits, and Site regulations

Eskom has a strict entrance requirements which tenderers need to allow for in their prices, and the *Contractor* must comply with. These will be provided by the *Project Manager* per Eskom's procedures.

5.1.2 Restrictions to access on Site, roads, walkways and barricades

In addition to the above there may be other restrictions once on the Site, plus rules relating to roads, walkways and the provision of barricades, the *Project Manager* will provide these limitations.

5.1.3 People restrictions on Site; hours of work, conduct and records

It is important that the *Contractor* keeps records of his people on Site, including those of his Subcontractors which the *Project Manager* or *Supervisor* have access to at any time. These records may be needed when assessing compensation events.

5.1.4 Health and safety facilities on Site

The Contractor shall align their emergency plan with the Employer's or Participants emergency plan.

5.1.5 Cooperating with and obtaining acceptance of Others

The Contractor shall abide by all Employer's and the specific Participant's requirements and conditions.

5.1.6 Publicity and progress photographs

Contractor to request permission in writing from the *Project Manager* to acquire rights to take photographs on Eskom sites.

5.1.7 *Contractor's* Equipment

The *Contractor* shall keep daily records of his equipment used on Site and the Working Areas (distinguishing between owned and hired equipment) with access to such daily records available for inspection by the *Project Manager* at all reasonable times.

5.1.8 Equipment provided by the *Employer*

The *Employer* will not provide any equipment required by the Contractor to perform the services.

5.1.9 Site services and facilities

Provided by the *Employer*

- Reliability Services Participants and contract parameters
- Aggregate schedules and dispatch signals

- Assistance with access to Eskom/Participant sites as and when required.
- Access to MV90 and Powi data
- Third party access for the consultant
- Physical Access to Eskom Server Room for Data Collector hosting;
- Network Access to Eskom Server Room for Data Collector hosting;
- Eskom APN Network and Consultant access to Eskom APN Network;
- Per network that Eskom decides to use, SIM Cards provisione

5.1.10 Facilities provided by the Contractor

The Contractor shall supply all plant and materials required for providing the services.

The Contractor shall make arrangements for accommodation and transportation of his/her employees. The Contractor shall make his own arrangements to house his employees and transports them to site in a closed vehicle specifically designed for passenger transport (bus or similar) which is in a roadworthy condition. All safety precautions shall be taken into consideration.

5.1.11 Existing premises, inspection of adjoining properties and checking work of Others

The *Contractor* is required to inspect the work of Others to which he is required to connect and such inspections to be included in the programme avoid delays to his work.

5.1.12 Control of noise, dust, water and waste

The Contractor shall comply with the Occupational Health and Safety Act 85 of 1993 and National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (NEMWA).

5.1.13 Hook ups to existing works

- All personnel working at heights shall be certified medically fit to work at heights.
- The Contractor shall have a valid certificate for working at heights and must have been appointed in writing. The Contractor shall ensure that all the FAS (fall arrest system) is inspected prior to use.
- The Contractor shall ensure the appointed work at heights rescuers have the appropriate rescue kits.
- The Contractor shall ensure that all the mechanisms and equipment that will be used for working at heights are inspected including all the necessary supporting documents e.g. the use of skyjacks, stepladder, scaffoldings etc.

5.2 Completion, testing, commissioning and correction of Defects

5.2.1 Work to be done by the Completion Date

On or before the Completion Date the *Contractor* shall have done everything required to Provide the Works except for the work listed below which may be done after the Completion Date but in any case before the dates stated. The *Project Manager* cannot certify Completion until all the work except that listed below has been done and is also free of Defects which would have, in his opinion, prevented the *Employer* from using the *works* and Others from doing their work.

	Item of work	To be completed by
	As built drawings of	Within _____ days after Completion
	Performance testing of the <i>works</i> in use as specified in paragraph _____ of this Works Information.	See performance testing requirements.

5.2.2 Materials facilities and samples for tests and inspections

From time-to-time random sample test and inspections may be requested, to ensure good quality of the goods being supplied. The *Contractor* shall conduct the applicable tests from the approved FAT and SAT procedures as selected by the Employer.

5.2.3 Commissioning

Commissioning is to be done before or after Completion depending on the approved Programme and arranged by the *Project Manager*.

5.2.4 Start-up procedures required to put the *works* into operation

In order to put the *works* into operation the *Employer* may require the *Contractor* to either do this for him or be in attendance whilst he does it, depending on who is the responsible person.

5.2.5 Take over procedures

Take-over is after or at the same time as Completion. The *Contractor* is to arrange an inspection before completion of the installation to inspect and identify any outstanding or any defects. The Project Manager may require the *Contractor* to provide assistance, on an as and when required basis.

5.2.6 Access given by the *Employer* for correction of Defects

The Project Manager arranges access for the Contractor to use a part of the works which has been taken over if needed to correct any Defects. After the works have been put into operation, the Employer may require the Contractor to undertake certain procedures before such access can be granted. The Contractor will be responsible for ensuring that the area to be worked in is barricaded before correcting any Defects.

5.2.7 Performance tests after Completion

The Contractor to demonstrate that the works can operate as guaranteed by the Contractor (in Contractor's Works Information) or specified by the Employer either here or elsewhere in this Works Information.

5.2.8 Training and technology transfer

The Employer requires the Contractor to provide training on the use of the access control or any associated transfer of technology from him to the Employer.

5.2.9 Operational maintenance after Completion

The Employer may require the Contractor before the defects date to perform certain duties after Completion and take over which relate to maintenance of the works.

C3.2 *CONTRACTOR'S WORKS INFORMATION*

This section of the Works Information will always be contract specific depending on the nature of the *works*. It is most likely to be required for design and construct contracts where the tendering contractor will have proposed specifications and schedules for items of Plant and Materials and workmanship, which once accepted by the *Employer* prior to award of contract now become obligations of the *Contractor* per core clause 20.1.

Typical sub headings could be

- a) *Contractor's design*
- b) Plant and Materials specifications and schedules
- c) Other

This section could also be compiled as a separate file.

Part 4: Site Information

Document reference	Title	No of pages
C4	This cover page Site Information	1
	Total number of pages	

PART 4: SITE INFORMATION

Core clause 11.2(16) states

“Site Information is information which

describes the Site and its surroundings and
is in the documents which the Contract Data states it is in.”

In Contract Data, reference has been made to this Part 4 of the contract for the location of Site Information.

Delete this note and others given in boxes like this one at final draft stage.

The compiler of this document should first consult the ECC3 2013 Guidance Notes page 24. Further notes are given under each heading below.

Site Information is information about the Site at the time of tender upon which the tendering contractor bases his prices. It is fixed and does not include anything about what happens on the Site after award; that is Works Information.

Site Information does not include weather data; that is included in the Contract Data.

If the *Contractor* subsequently encounters conditions which are different to those described here, he may be entitled to notify a compensation event.

General description

As per the requirements of the scope.

Existing buildings, structures, and plant & machinery on the Site

As per the nature and requirements of the scope.

