

Part 2 – Bills of Quantities (BoQ's) (KSIA)

Part 2: Post-Implementation, Management, Support and Preventative Maintenance

Ongoing post-implementation support and long-term preventative maintenance will be provided for the fully functional AMR systems across all ACSA airports. The Contractor shall provide preventative maintenance and operational support for the smart water and electricity metering system and associated AMR system for Five (5) years. The system includes all onsite smart meters (water and electricity) and all associated communication, server, and software infrastructure.

The Twelve (12) Months Defects Liability Period, and a minimum of Twelve (12) Months Warranty Period, shall run concurrently and commence from the date of issuance of the **Practical Completion Certificate** and commissioning acceptance of the completed smart metering infrastructure/solution by ACSA. The Five (5) year Maintenance Period (Opex) shall run concurrently with the AMR system installations phase (CAPEX) due to the requirement for ongoing operational and monthly billing support for the smart metering system, unless otherwise specified in the Contract.

Notwithstanding the concurrent operation of these periods, the Contractor shall remain fully responsible for performing all maintenance services in accordance with the Maintenance requirements of the Contract. The existence of the Defects Liability Period or Warranty Period shall not relieve the Contractor of its obligations to provide routine inspections, preventive maintenance, system support, and operational assistance during the Maintenance Period.

The scope of services shall include continuous system monitoring and performance management; contract administration; full spares provisioning and inventory management; office-related overheads; replacement of defective or worn components; configuration, testing, reconfiguration and calibration of smart meters and the AMR system; software support including license updates, patches and version upgrades; event log monitoring, diagnostics and reporting; skills transfer and training; and all labour, supervision, tools, travel, accommodation and associated resources necessary to maintain full operational performance.

All required spare parts, replacement meters, communication modules and associated components necessary to maintain system reliability and meet Service Level Requirements shall be included in the Contractor's rates. The Contractor shall maintain adequate spare

inventory levels throughout the contract period to ensure uninterrupted service delivery. The Contractor shall comply with a 180-minute emergency and a 24/48-hour urgent fault response Service Level Agreement (SLA) from notification of a fault. Response shall mean physical attendance on site or confirmed remote intervention where resolution can be achieved without site attendance.

Rates shall include full spares provisioning and inventory management, labour, supervision, tools, travel, accommodation, office overheads, software licenses, patches, training and all associated costs. Provisional Sums shall be spent only upon written instruction of the Employer and shall be re-measurable where applicable.

Part K: Preventative Maintenance, Management and System Support

Activity Ref.	Activity description	Unit (UOM)	QTY	Rate (Rands)	Total Amount (Excl. VAT)
			(a)	(b)	(a)x(b)
K1.1	Preventative maintenance including system monitoring and management, reporting, calibration and testing smart meters, software updates, annual tariff adjustments, fault detection, assign and/or remove tenants billing information and provide consumption analytics.	Quarterly	4		
K1.2	Diagnosis, troubleshooting, repair and restoration of faulty smart metering systems, including replacement of defective components, communication recovery, software issue resolution, recommissioning, testing, calibration verification, tenant billing updates, and all associated labour and reporting to restore the system to full operational status.	Ad hoc	1		
Part K Total Amount Carried Forward to Summary					

Part L: Billing Support					
Activity Ref.	Activity description	Unit (UOM)	QTY	Rate (Rands)	Total Amount (Excl. VAT)
			(a)	(b)	(a)x(b)
L1.1	Generating monthly Electricity and Water (Utility) billing reports, and invoices, (rate per month) advanced meter billing invoices and reports generated, including filling of the attached Annexure excel-sheet), including analytics, alerts, dashboards & audit support.	Monthly	12		
L1.2	Provision for investigating, addressing and attending to tenant or customers billing queries including system logging query, customer communication, disputes, site visits, usage or consumption investigation, recalculations, Meter data review, tariff verification & correction/adjustments, report generation and feedback to client/customers.	Monthly	12		
Part L Total Amount Carried Forward to Summary					
Part M: Call – Call Out Fees					
SLA Call-Out Services (Not limited to office hours response, unlimited Callouts), including travelling costs, and first hour of labour					

Activity Ref.	Activity description	Unit (UOM)	QTY	Rate (Rands)	Total Amount (Excl. VAT)
			(a)	(b)	(a)x(b)
M1.1	Estimated Call outs.	Each	12		
Part M Total Amount Carried Forward to Summary					
Part N: Annual lump Sum for Permits and Training (OPEX)					
Activity Ref.	Activity description <i>(Contractor to claim against actual invoices)</i>	Unit (UOM)	QTY	Rate (Rands)	Total Amount (Excl. VAT)
			(a)	(b)	(a)x(b)
N1.1	Annual lump sum amount of R 24 600 (Twenty-Four Thousand, Six Hundred Rand) for Permits per Person, Vehicle Parking, Airside Induction Training (AIT) per Person, Airside Vehicle Operator Permit (AVOP), and General security awareness training, Personnel and vehicle vetting, including 10% handling fee.	Sums	1	R 24 600	R 24 600
Part N Total Amount Carried Forward to Summary					R 24 600
Part O: Full Spares lump sum for Smart Meters and AMR System					
Activity Ref.	Spare parts description	Unit (UOM))	QTY	Rate (Rands)	Total Amount (Excl. VAT)
			(a)	(b)	(a)x(b)
O1.1	A full spares lump sum has been included, based on industry benchmarks for AMR systems. This includes spare smart meters, communication devices/modules, gateways, CT's/VT's, and critical	Sum	1	R 189 120	R 189 120

	components to ensure minimal downtime and compliance with SLA requirements, such as fuses, connectors, breakers, batteries, Isolators, valves & SPD's. The Service Provider to note that the Rates are as priced in the main BoQ for Spares, to ensure system reliability, fast recovery and reduced downtimes. Fill in the attached Annexure excel-sheet for critical spares as per allocated budget.				
Part O Total Amount Carried Forward to Summary					R 189 120
Total (Part K + L + M + N + O) <i>(Sum of Year 1 Post-Implementation, Management, Support and Preventative Maintenance), Excluding VAT</i>					

Part 2: for OPEX (5 – Years)	
Summary of Contract – Specific Activity Schedules corresponding to Annexure A2 (KSIA) Operational and Maintenance Support: King Shaka International Airport (KSIA)	
Description	Total Amount (Excl. VAT) KSIA
Part K: Preventative Maintenance, Management and System Support	
Part L: Billing Support	
Part M: Call-Outs Fees	
Part N: Annual Lump Sum Amount for Permits and Training (OPEX)	R 24 600

Part O: Full Spares Lump Sum for Smart Meters and AMR System	R 189 120
Total (Part K + L + M + N + O) (Sum of Year 1 Post-Implementation, Management, Support and Preventative Maintenance), Excluding VAT	

PART P: Summary Price for Total (Part K + L + M + N + O) with 6% Escalations			
Period	Value (V)	Consumer Price Index (CPI)	Total (V+CPI)
Year 1	Total (Part K + L + M + N + O)	N/A	R
	R	R0	
Year 2	Total from year 1	6%	R
	R	R	
Year 3	Total from year 2	6%	R
	R	R	
Year 4	Total from year 3	6%	R
	R	R	
Year 5	Total from year 4	6%	R
	R	R	
PART P: Total OPEX , (Sum of Year 1 to 5 of Post-Implementation, Management, Support and Preventative Maintenance after 6% escalations), Excluding VAT			R

Skill		After Hours Hourly Rate
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	Normal Hourly Rate	Weekdays	Saturdays	Sundays	Public Holiday
Supervisor	R	R	R	R	R
Technician	R	R	R	R	R
Artisan	R	R	R	R	R
Semi-Labourer	R	R	R	R	R
Labourer	R	R	R	R	R

Travel

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Rate per Km	Distance in Km (Return Trip)	Total per trip exc VAT
R		R

Percent Mark-up (Third party procured items/services), for Reference Purposes	
Value of Item or Services	**Mark-up (Contractor to fill in % values)
R0 - R2,000	%
R2,001 - R5,000	%
R5,001 - R10,000	%
R10,001 - R50,000	%
R50,001 – R100,000	%
R100,001 – R200,000	%

Note:

- The annual lump sum shall cover all labour, spares, travel, overheads, software, and administrative costs.

- *Tenderers must provide a fixed annual lump sum for each of the Five (5) years of the contract.*
- *Rate is inclusive of unit or material price, all accessories, transport to site, labour, profit & risks.*
- *Material or equipment are inclusive of all the accessories required and must be SABS/SANS approved.*
- *The Five (5) year Maintenance Period (Opex) shall run concurrently with the AMR system installations phase (CAPEX) due to the requirement for ongoing operational and monthly billing support for the smart metering system, unless otherwise specified in the Contract.*
- *The appointed maintenance service provider **shall be compensated monthly for billing support services** as rated in the BoQ, based on the successful provision of meter data management (consumptions), validation, and generation of billing invoices and reports, in accordance with the contract requirements.*