

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
6.8.4	The Equipment offered including all additional equipment shall be supported by a full set of technical documentation, to assist SA Police Service Technical Personnel in the evaluation stage of the Bid. This documentation shall also allow the SA Police Service to maintain the equipment offered. The technical documentation shall include at least the following:	
6.8.4.1	Detailed technical specifications.	
6.8.4.2	Detailed wiring diagrams	
6.8.4.3	A detailed technical description of the operation of the equipment offered.	
6.8.4.4	A complete list of components, including manufacturers part numbers, component numbers and descriptions. International ICN codes for components shall be included, if available.	
6.8.4.5	A recommended spare parts' list shall be included by the Bidder.	
6.9	REPAIRS UNDER GUARANTEE	STATE:
6.9.1	Bidders shall have qualified personnel and fully equipped workshop/manufacturing facilities available, to enable the Bidder to deliver a professional and speedy service to the SA Police Service during the guarantee period.	
6.9.2	Full maintenance and repairs shall be finalized by the successful Bidder, within one (1) week after faulty equipment has been identified and pointed out to the relevant bidder.	
6.9.3	Bidders must submit a name list accompanied with certified copies of technical qualifications applicable to this requirement for all qualified personnel under the Bidders control.	
6.9.4	Bidders shall state the details of spares in stock, workshops and any other relevant facilities under the Bidder's control throughout the RSA.	
6.9.5	Note that no offer will be accepted from a Bidder, if the Bidder has no qualified personnel, sufficient spares in stock and a fully equipped workshop. The Bidder shall provide full details of such personnel, spares and workshop for inspection by the SA Police Service during the evaluation stage if deemed necessary by the Bid Evaluation Committee.	
6.9.6	Bidders shall report the following to the SA Police Service, Division Technology Management Services in writing on a monthly basis, for any repairs done to equipment during the duration of the contract and the guarantee period: <ul style="list-style-type: none"> • Date of fault report, • Nature of the fault, & • Parts replaced Date Microwave Radio is handed back to the SAPS.	

90/104 TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
6.10	TRAINING	STATE:
6.10.1	Each Bidder shall ensure that a comprehensive technical training schedule as per the equipment offered is available with the offer.	
6.10.2	The Bidder shall provide relevant technical and installation training for SAPS Radio Technical personal for all equipment offered in this Chapter.	
6.10.3	Cost of any training or relevant material offered shall be specified by the Bidder and included in the Bid price indicated in Appendix A. Cost of training shall be indicated as a per person price.	
6.11	AVAILABILITY OF SPARES	STATE:
6.11.1	Bidders shall certify in writing that the bidder is capable of supplying spares as per the relevant Chapter of this bid for all equipment as asked for in this Bid document within two (2) weeks from receiving an official order.	
6.11.2	Failure of a Bidder to deliver any spares within this two (2) weeks at any stage of the contract period or within a period of five (5) years without good reason, shall result in penalty clauses as per General Conditions of Contract par 22 be enforced on the quoted prices of the spares.	
6.12	PROGRAMMING SOFTWARE	STATE:
6.12.1	All Microwave radio links offered shall be accessible and configured through a standard Webb browser. Bidders shall note that no offer that requires proprietary software for setup and configuration of the equipment will be accepted by the SAPS.	
6.12.2	In the event that advanced programming software is required to program specific requirements, the software shall be included in the total bid price.	
6.12.3	Bidders shall state whether all relevant software will be made available to the SAPS for use without holding specific sections or parts of their software as proprietary software. If a Bidder is not willing to release all such software to the SAPS, the SAPS will not consider the Bidders offer.	
6.12.4	All software shall have full usage facilities. Software with limited usage [e.g. 30 times usage only, etc.] or other factors which limit the SAPS technical staff to perform their duties shall not be accepted and shall result in non-acceptance of the Bid.	
6.12.5	If it should be determined at a later stage that the software delivered does not meet the requirements as described in par. 6.12.3, the Bidder shall be liable for all the costs to correct or replace that relevant software package.	
6.12.6	Bidders shall make available to the SAPS the latest software and firmware versions of all equipment supplied to the SAPS in this bid, free of charge for at least up to five (5) years after the warranty period.	

91 / 104TR(22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
6.13	DELIVERY	STATE:
6.13.1	The successful Bidder shall deliver the offered equipment to the address indicated on the official order or as decided between the parties. Cost for this delivery shall be quoted for as, per Province price and included in the Bid price.	
6.13.2	The Bidder shall make firm arrangements (date and time) with staff from Division Technology Management Services for delivery.	
6.13.3	The successful Bidder shall inform the SA Police Service, in writing (email) on a regular basis with respect to construction/installation when inspection can be done on services delivered. The equipment installed/constructed shall be inspected by a representative of the SA Police Service, Division Technology Management Services at the High Site where installation/construction took place. A certificate of inspection and approval for the equipment/services delivered will be issued by the latter representative before payment can be processed.	
6.13.4	See also Chapter 2 section 2.3 "Quality and Standards". No equipment will be accepted by the SA Police Service that does not comply with this section	
6.14	STANDARDS	STATE:
	E1	
6.14.1	ITU-T G.703, G.736, G.775, G.823, G.824, G.828, ITU-T I.432, ETSI ETS 300 147, ETS 300 417	
6.14.2	TDM Pseudowire <ul style="list-style-type: none"> · VLAN (MEF-8) · IP/UDP (IETF) · MPLS (MFA8) · SAToP – RFC 4553 · CESoP – RFC 5086 * 	
6.14.3	Ethernet <ul style="list-style-type: none"> · 10/100/1000base-T/X (IEEE 802.3) · Ethernet VLANs (IEEE 802.3ac) · Virtual LAN (VLAN, IEEE 802.1Q) · Class of service (IEEE 802.1p) · Link aggregation (IEEE 802.3ad) · Auto MDI/MDIX for 1000baseT · RFC 2460: IPv6 Traffic Classes 	

92 | 10 4 TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
--	-------------	---------------

APPENDIX A PART 6

6.14	CHAPTER 6 PRICING TABLE	
	MANDATORY PRICING INCLUDING VAT	PRICE
Note:	Pricing must be supplied for all lines in this section — R0.00 prices will be deemed to be free of charge for unlimited volumes.	
6.14.1	PRICING FOR STANDARD COMPONENTS	
6.14.1.1	Base Price for a complete 50 Mbps link including AES encryption excluding the antenna mounting brackets and antennas as per the following:	
6.14.1.1.1	ICN -5985T05028496 - Complete 4/6GHz Link	
6.14.1.1.2	ICN - 5985T05028497 - Complete 7/8GHz Link	
6.14.1.1.3	ICN - 5985T05028498 - Complete 15GHz Link	
6.14.1.1.4	ICN - 5820T05065266 - Complete 18GHz Link	
6.14.1.1.5	ICN - 5985T05028499 - Complete 23GHz Link	
6.14.1.1.6	ICN - 5985T05028500 - Complete 38GHz Link	
6.14.2	PRICING FOR ENGINEERING SERVICES	
6.14.2.1	ICN - 9825T05065285 - As per paragraph 6.1.8 of this chapter.	
6.14.3	PRICING FOR EXTENDED WARRENTY	
6.14.3.1	Extension of standard warranty to full coverage (parts and labour) and on-site repairs for an additional 2 years , i.e. 3 years total (36 months) from date of delivery	
6.14.4	PRICING FOR TECHNICAL TRAINING	
6.14.4.1	ICN -9825T05083691- Price per technician as per paragraph 6.10 of this chapter.	
6.14.5	PRICING FOR ACCESSORIES AND COMPONENTS	
Note:	Pricing must be supplied for all available components. Bidders must populate a detailed price list of all available components required for a complete solution. The price list will form part of this bid. (not limited to)	
a)	Various capacity licence (50Mbps – 1Gbps)	
b)	Various antennas	
c)	Installation kit	
d)	Mounting Brackets	
e)	XPIC etc.	

93 / 104 TR (2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
	CHAPTER 7	
7	FEEDERS AND CONNECTORS	STATE:
7.1	SCOPE OF THE REQUIREMENT	
7.1.1	The supply and delivery of various feeder cables, associated connectors and various clamps and associated sundries for Microwave equipment installation.	
7.1.2	Bidders shall offer a comprehensive price lists in Section 7.8 of this Chapter for the various types of feeder cables and connectors available.	
7.1.3	The range of feeders to be offered shall focus on the following environments:	
	<ul style="list-style-type: none"> • Mobile Radio (VHF; UHF) • Microwave Radio 	
7.1.4	The feeders shall ensure low loss ability over various lengths.	
7.1.5	The feeders shall allow for a variety of bending radiuses.	
7.1.6	The feeder cable shall have an impedance of 50 ohm.	
7.1.7	The bidder shall further provide the following connectivity cabling with associated connector range and connector tools. All cables and connectors offered shall be of an acceptable quality and durability:	
7.1.7.1	<ul style="list-style-type: none"> • UTP Cabling (Indoor and Outdoor) 	
7.1.7.2	<ul style="list-style-type: none"> • UTP connectors for indoor and outdoor 	
7.1.7.3	<ul style="list-style-type: none"> • Patch/fly leads made-up (1m, 2m, 3m, 5m and 10m) 	
7.1.7.4	<ul style="list-style-type: none"> • Fibre Optical cabling (Indoor and Outdoor) 	
7.1.7.5	<ul style="list-style-type: none"> • Fibre Optical splicing kit 	
7.1.7.6	<ul style="list-style-type: none"> • LMR 400 Hi-flex –per 100m Roll 	
7.1.7.7	<ul style="list-style-type: none"> • N-Type Connector Male and Female straight Crimping LMR 400 –per 1 	
7.1.7.8	<ul style="list-style-type: none"> • N-Type Connector Male 90 angle LMR 400 –per 1 	
7.1.7.9	<ul style="list-style-type: none"> • ½" Cumfy clamp and clip 	
7.1.7.10	<ul style="list-style-type: none"> • ½" foam dielectric (Not Hi-flex) - per 100m Roll 	
7.1.7.11	<ul style="list-style-type: none"> • N-type Connector male and female straight for ½" foam dielectric per 1 	
7.1.7.12	<ul style="list-style-type: none"> • 7/8" foam dielectric - per 100m Roll 	
7.1.7.13	<ul style="list-style-type: none"> • N-type Connector male and female straight for 7/8" foam dielectric per 1 	
7.1.7.14	<ul style="list-style-type: none"> • In-line lightning arrestor N-type 	

94 / 104 TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
7.2	TRACK RECORD - APPENDIX B	STATE:
7.2.1	In order to establish whether the Bidder has a proven track record in this field, details of users in the RSA to whom the Bidder has successfully supplied the equipment offered, shall be submitted with the Bid documents for verification by the SA Police Service.	
7.2.2	The track record shall be compiled by the Bidder and labelled "Appendix B". The details of previous clients shall include at least the following: a) Name of Client/Organization, b) Full Postal and Street Address, c) Telephone and Facsimile numbers, d) Contact Person, e) Type and quantity of equipment supplied, f) Date when contract was finally completed and equipment was handed to the client, and g) Value of the contract in current Rand value.	
7.2.3	The Bidder must clearly indicate against each previous contract with a client whether the equipment offered is exactly similar to the equipment called for in this specification or whether the equipment offered differs from the equipment called for and the extent of the difference.	
7.3	TIME SCHEDULE	STATE:
7.3.1	It is a requirement of this Bid that delivery and installation of ordered equipment shall commence not later than eight (8) weeks after an official order has been received by the successful Bidder, unless otherwise negotiated. Due to the various construction and installation time frames the contracted bidder for a specific service shall interact with the SAPS to determine exact time frames per site.	
7.3.2	Non-compliance to the above-mentioned delivery date as agreed upon per site will result in the enforcement of penalties in terms of General Conditions of Contract.	
7.4	DOCUMENTATION	STATE:
7.4.1	The successful bidder shall supply documentation where applicable per item offered.	
7.5	DELIVERY	STATE:
7.5.1	The successful Bidder shall deliver the offered equipment to the address indicated on the official order or as decided between the parties. Cost for this delivery shall be quoted for as a per Province price and included in the Bid price	

95 / 104 TR (2) 4

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
--	-------------	---------------

APPENDIX A PART 07

7.6	CHAPTER 7 PRICING TABLE	
	MANDATORY PRICING INCLUDING VAT	PRICE
7.6.1	PRICING FOR STANDARD COMPONENTS	
7.6.1.1	ICN - 5995T05065293 - UTP Cable Indoor – 100m	
7.6.1.2	ICN - 5995T05065294 - UTP Cable Outdoor – 100m	
7.6.1.3	ICN - 5935T05065303 - UTP connectors for indoor and outdoor	
7.6.1.4	ICN - 5995T05065295 - UTP Patch/fly leads made-up 1m	
7.6.1.5	ICN - 5995T05065296 - UTP Patch/fly leads made-up 2m	
7.6.1.6	ICN - 5995T05065297 - UTP Patch/fly leads made-up 3m	
7.6.1.7	ICN - 5995T05065298 - UTP Patch/fly leads made-up 5m	
7.6.1.8	ICN - 5995T05065299 - UTP Patch/fly leads made-up 10m	
7.6.1.9	ICN - 5995T05065300 - Fibre Optical cable Indoor – 100m	
7.6.1.10	ICN - 5995T05065301- Fibre Optical cable Outdoor – 100m	
7.6.1.11	ICN - 5935T05065305 - Fibre Optical splicing kit	
7.6.1.12	ICN - 6145T05004780 - Cable, Foam, 50 Ohm, LMR400, P/1M	
7.6.1.13	ICN - 5995T05065302 - Cable, Coax LMR 400 Hi-flex - per 100m Roll	
7.6.1.14	ICN - 5935T05065289 - N-Type Connector Male straight Crimping LMR400 –per 1	
7.6.1.15	ICN - 5935T05065290 - N-Type Connector Female straight Crimping LMR 400 –per 1	
7.6.1.16	ICN - 5935T05065291- N-Type Connector Male 90 angle LMR 400 per 1	
7.6.1.17	ICN - 5999T05065306 - Cumfy clamps and clips LMR 400 x 50 pack	
7.6.1.18	ICN - 5995T05028501 - Cable, Coax, ½ Inch, Corrugated x 100m Roll	
7.6.1.19	ICN - 5935T05001625 - Connector, Quick Fit, N-Type, Male for ½ Inch per 1	
7.6.1.20	ICN - 5999T05065307 - Cumfy clamps and clips ½ Inch, Corrugated x 50 pack	
7.6.1.21	ICN - 6145T05018783 - Cable, Coax, ¾ Corrugated per 100m Roll	
7.6.1.22	ICN - 5935180081700 - Connector, Male, ¾ Inch, N-Type per 1	
7.6.1.23	ICN - 5999T05065308 - Cumfy clamps and clips ¾ Corrugated x 50 pack	
7.6.1.24	ICN - 5920T05065309 - In-line lightning arrestor N-type per 1	

96 / 104 TR (2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
	CHAPTER 8	STATE:
8	POWER SUPPLY, RECTIFIERS AND BATTERY BACKUP	
8.1	SCOPE OF THE REQUIREMENT	
8.1.1	The successful bidder shall supply the equipment and services for delivery, installation, support and maintenance of Rectifier and Battery back-up solutions as required per site installation.	
8.1.2	The requirement is for grid connected (Eskom supplied 230 V AC) power supply and rectifier systems to provide -48 VDC (positive ground) with standby battery power supplies for electronic equipment such as Communication and Information Technology equipment; Provision shall also be made to fit an optional inverter (-48V DC to 230V AC) module when required.	
8.2	THE FOLLOWING CAPACITIES ARE REQUIRED:	STATE:
8.2.1	Low Consumption Sites:	
8.2.1.1	Power: minimum 5 kW at -48V DC;	
8.2.1.2	DC distribution: <ul style="list-style-type: none"> Up to 6 DC load MCBs; MCBs ranging from 6A to 63A in capacity; Combination to be specified by SAPS per order. 	
8.2.1.3	Minimum 8 hours standby battery capacity;	
8.2.1.4	Fitted for (but not with) optional inverter module(s) up to 3kVA (2kW continuous).	
8.2.1.5	A single phase 15A AC input version	
8.2.1.6	Indoor and Outdoor version: SAPS will specify per order.	
8.2.2	High Consumption Sites:	STATE:
8.2.2.1	Power: Minimum 10kW at -48V DC	
	<ul style="list-style-type: none"> The system shall be delivered with rectifier modules for a minimum capacity of 3600W; please specify the number and type of rectifier modules required for this. 	
	<ul style="list-style-type: none"> It shall be possible for SAPS to increase the capacity from 3600W/4000W to 7200W/8000W or to full capacity by adding rectifier modules; please specify the number and type of rectifier modules required per increment up to full power. 	

97 / 104TR G22

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.2.2.2	DC distribution	
	<ul style="list-style-type: none"> Minimum of 9 DC load MCBs; 	
	<ul style="list-style-type: none"> MCBs ranging from 6A to 63A in capacity; 	
	<ul style="list-style-type: none"> Combination to be specified by SAPS per order. 	
8.2.2.3	Minimum 8 hours up to 72 hours battery capacity; SAPS will specify requirement per order.	
8.2.2.4	Fitted for (but not with) optional inverter modules up to 4kW (5kVA) continuous load.	
8.2.2.5	Indoor and Outdoor version: SAPS will specify per order.	
8.2.2.6	Single phase and Three phase AC input capabilities.	
8.3	GENERAL REQUIREMENTS	STATE:
8.3.1	The following general requirements are applicable to all products.	
8.3.1.1	AC Incoming	STATE:
8.3.1.1.1	Connection:	
	<ul style="list-style-type: none"> Single phase or Three phase capabilities 	
	<ul style="list-style-type: none"> Incoming isolator switch. 	
	<ul style="list-style-type: none"> Class 1 and 2 surge protection. 	
	<ul style="list-style-type: none"> Electrical Reticulation. 	
	<ul style="list-style-type: none"> Certificate of Compliance (CoC). 	
8.3.1.2	AC specification:	STATE:
8.3.1.2.1	Nominal voltage 230V AC (per single phase);	
8.3.1.2.2	Full Rectifier output power range at 25°C: 175V AC to 275V AC;	
8.3.1.2.3	Extended Rectifier operation (de-rated 50% or better) at 25°C: 90V AC to 175V AC and 275V AC to 300V AC;	
8.3.1.3	Rectifier specifications	STATE:
8.3.1.3.1	Conversion and DC output	
8.3.1.3.1.1	Nominal DC output voltage -48V DC; nominal range (adjustable range) 43V DC to 60 V DC; Pre-set accuracy $\pm 0.1V$; Positive ground.	

98 / 104 TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.3.1.3.1.2	Noise:	
	<ul style="list-style-type: none"> Ripple (<100Hz): <10mV rms (un-weighted) Audio Frequency (300 Hz – 3.4 kHz): <2mV Wide band (5Hz – 1MHz): <10mV rms (un-weighted) Peak to peak (0 – 20 kHz): <200mV p-p (un-weighted) Discrete frequency (3.4 kHz – 150 kHz): <5mV rms (1 kHz wide selective frequency). 	
8.3.1.3.1.3	Efficiency:	
	<ul style="list-style-type: none"> Minimum: >91% full operating range, 50% to 100% of rated full load; Preferred: >95% full operating range, 20% to 100% of rated full load. 	
8.3.1.4	Protection	STATE:
8.3.1.4.1	Automatic over temperature shut down.	
8.3.1.4.2	Continuous output short circuit protection to less than 130% of rated full output current.	
8.3.1.4.3	Rectifier automatic safety shut down below 90V AC and above 300V AC; Automatic return to normal operation when AC supply return to within operating range.	
8.3.1.4.4	Soft start start-up	
8.3.1.5	Controller	STATE:
8.3.1.5.1	Human interface	
8.3.1.5.1.1	Front panel LCD and soft keys for on-site service without PC.	
8.3.1.5.1.2	Large display,	
	<ul style="list-style-type: none"> 128x128 pixels or better; 30mmx30mm or better viewing area; Adjustable contrast; Vertical or horizontal orientation to accommodate controller vertical or horizontal installation where required. Menu driven display via soft key selection and navigation. 	
8.3.1.5.1.3	Front panel status LEDs: Power, major alarm, minor alarm etc.	
8.3.1.5.1.4	User interface functions	
	<ul style="list-style-type: none"> View system values, status messages, alarms. 	

99 / 104 TR (2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
	<ul style="list-style-type: none"> Set/change system and operating values/parameters. 	
	<ul style="list-style-type: none"> Start/stop control functions. 	
	<ul style="list-style-type: none"> Test alarms, controls. 	
	<ul style="list-style-type: none"> Map I/O's. 	
8.3.1.6	Communications	STATE:
8.3.1.6.1	Front panel USB/ RJ-45 interface for PC connection locally – USB1.1 or latest.	
8.3.1.6.2	Serial interface RS-232 (DB9M), RS-485 (RJ-45) and Ethernet (RJ-45) connection for PC connection locally.	
8.3.1.6.3	Remote monitoring and control via modem (PSTN or GSM), Ethernet, web and SNMP.	
8.3.1.6.4	Web interface	
	<ul style="list-style-type: none"> Full configuration and control of controller. 	
	<ul style="list-style-type: none"> Secure web access control: https, username and password. 	
8.3.1.6.5	SNMP interface	
	<ul style="list-style-type: none"> SNMP Version: 1,2c, 3. 	
	<ul style="list-style-type: none"> SNMPv3 security settings: Authentication password, privacy password. 	
	<ul style="list-style-type: none"> SNMPv3 protocols: Authentication: HMAC-SHA; Privacy: CBC-DES. 	
	<ul style="list-style-type: none"> Functions: Get/Set/Trap. 	
8.3.1.6.6	Ethernet interface	
	<ul style="list-style-type: none"> 10/100 Base-T, RJ-45 connector. 	
	<ul style="list-style-type: none"> Protocols: TCP/IP, SNMP, S3P over IP, http, https, SCP2. 	
8.3.1.6.7	RS-232 (DTE) interface	
	<ul style="list-style-type: none"> Protocols: S3P, CSP2 	
8.3.1.7	Inputs/Outputs	STATE:
8.3.1.7.1	At least 6 user programmable digital (/relay) outputs (in addition to dedicated system outputs where applicable);	

100/104 TR(2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.3.1.7.2	At least 6 user programmable digital inputs (in addition to dedicated system outputs where applicable);	
8.3.1.7.3	System analogue inputs for typically bus voltage, temperature, current, battery mid-point monitoring.	
8.3.1.7.4	The Controller must be able to control/monitor additional I/O's when additional I/O boards are added to the system where required (e.g. for larger systems or additional site control functions).	
8.3.1.8	Data and event logs	STATE:
8.3.1.8.1	Data log:	
	<ul style="list-style-type: none"> The Controller shall be able to log system parameters (AC Voltage, Bus Voltage, Load Current, Rectifier Current, Battery Current, Battery Temperature); 	
	<ul style="list-style-type: none"> The data log shall at least be 7000 records big. 	
	<ul style="list-style-type: none"> When the log is full, recording shall continue on a First in, first out (FIFO) wrap around basis (the oldest records overwritten). 	
	<ul style="list-style-type: none"> It shall be possible to download the data log via a local PC connection or remotely (e.g. Web access). 	
8.3.1.8.2	Event log:	
	<ul style="list-style-type: none"> The Controller shall log alarm events and system events set for logging. 	
	<ul style="list-style-type: none"> The Event log shall at least be 7000 records big. 	
	<ul style="list-style-type: none"> When the log is full, recording shall continue on a First in, first out (FIFO) wrap around basis (the oldest records overwritten). 	
	<ul style="list-style-type: none"> It shall be possible to download the data log via a local PC connection or remotely (e.g. Web access). 	
8.3.1.9	Alarms	STATE:
8.3.1.9.1	Standard alarms	
	The Controller shall have a default list of standard alarms including but not limited to:	
8.3.1.9.1.1	Rectifier status: E.g. Fail, Multiple Rectifier Fail, Rectifier Communication Lost, Multiple Rectifier Communication Lost, Missing Hardware;	
8.3.1.9.1.2	AC status: E.g. Partial AC Fail, AC Fail, System Overload;	
8.3.1.9.1.3	Fuse status: E.g. Load Fuse Fail, Battery Fuse Fail;	

101 / 104 TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.3.1.9.1.4	Low Voltage Directive (LVD) status: E.g. LVD Disconnected, LVD Fail, LVD Manual, LVD Characterization Error;	
8.3.1.9.1.5	Battery status: E.g. Battery Temp High, Battery Temp Low, Sensor Fail, Battery Test Fail, Equalize, Fast Charge, Battery Test, In Discharge, String Fail, Low Float, Low Load, High Float, High Load;	
8.3.1.9.1.6	Current status: Battery Current Limit, Rectifier No Load, Rectifier Current Limit;	
8.3.1.9.1.7	System status: E.g. Rectifier Over Temperature, Cabinet Fan Fail, Generator Enable, Generator Fail, Standby Mode, Wrong Battery Polarity.	
8.3.1.9.2	User defined alarms	STATE:
8.3.1.9.2.1	Digital inputs: A configurable name, active status, severity.	
8.3.1.9.2.2	Analogue inputs: A configurable name, high and low alarm thresholds, severity.	
8.3.1.9.3	Alarm settings	STATE:
8.3.1.9.3.1	It shall be possible to set the severity level (Critical, Major, Minor, etc.) for each alarm.	
8.3.1.9.3.2	It shall be possible to assign alarm relay settings (Rectifier Fail, AC fail, etc.)	
8.3.1.9.4	Advanced alarms	STATE:
8.3.1.9.4.1	It shall be possible to set-up advanced alarms using Boolean combinations of alarms, system functions (date/time, duration, etc.) and system values (e.g. battery current, battery temperature, bus voltage, etc).	:
8.3.1.10	Control Functions	STATE:
8.3.1.10.1	Complimentary to or in addition to the Controller requirements listed above, the Controller shall provide control functions/processes including but not limited to:	
8.3.1.10.2	Battery monitoring and testing without site attendance.	
8.3.1.10.3	Temperature compensated charging for increased battery lifetime.	
8.3.1.10.4	Battery fast charge control.	
8.3.1.10.5	Alarm/event logging with time and date.	
8.3.1.10.6	Rectifier module monitoring and control, including on/off.	
8.3.1.10.7	AC input Under/Over voltage shut down and restart.	

102/104 TR(2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.3.1.10.8	Generator on/off control and on (run) monitoring.	
8.3.1.10.9	Battery low voltage load disconnect.	
8.3.1.11	Environmental specifications	STATE:
8.3.1.11.1	Ambient Temperature	
8.3.1.11.1.1	Rated Operating Range: -10°C to +50°C	
8.3.1.11.1.2	Extended Operating Range: -40°C to +70°C	
8.3.1.11.1.3	Output de-rates above 50°C and below -10°C	
8.3.1.11.2	Humidity	STATE:
8.3.1.11.2.1	Nominal: 50% RH	
8.3.1.11.2.2	Range: < 95% RH (non- condensing)	
8.3.1.11.2.3	Altitude: < 3000m	
8.3.2	Applicable standards	STATE:
	The products shall comply with all of the standards specified for each category below.	
8.3.2.1	Safety	STATE:
8.3.2.1.1	IEC 60950-1	
8.3.2.1.2	UL 60950-1	
8.3.2.1.3	5.2.6.2 EMC	
8.3.2.2	Immunity:	STATE:
8.3.2.2.1	EN 61000-4-2: Electrostatic discharge	
8.3.2.2.2	EN 61000-4-3: Radiated radio frequency	
8.3.2.2.3	EN 61000-4-4: Electrical fast transients	
8.3.2.2.4	EN 61000-4-5: Surge	
8.3.2.2.5	EN 61000-4-6: Conducted radio frequency	
8.3.2.2.6	EN 61000-4-11: Dips, interruptions and variations	

103/104 TR (2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.3.2.3	Emissions:	STATE:
8.3.2.3.1	EN 61000-3-2: Harmonics	
8.3.2.3.2	EN 61000-3-3: Fluctuations and flicker	
8.3.2.3.3	EN 55022 / CISPR 22 (Class B): Conducted emissions (AC) and Radiated emissions	
8.3.2.3.4	EN 300 386 (Class A): Conducted emissions (DC)	
8.3.2.4	Certification	STATE:
8.3.2.4.1	Europe: CE-Mark or SANS	
8.3.2.4.2	USA: UL and FCC	
8.4	48VDC POWER SUPPLY BATTERY CHARGER WITH UPS FUNCTIONS	STATE:
8.4.1	The requirement is for grid connected (Eskom supplied 230 V AC) 48 VDC minimum 8Amp power supply with standby battery charger and UPS interface capabilities. With at least two (2) years warranty.	
8.4.2	The power supply shall have voltage protection such as AC Charging functions with constant current limiting which recovers automatically after the fault condition is resolved. Short circuit or Over load/voltage protection	
8.4.3	The UPS interface and functionality shall be protected by an internal easy accessible fuse.	
8.4.4	The output voltage shall range between 48 to 58V with a +/- 1% tolerance.	
8.4.5	A maximum ripple noise of 240mVp-p with a temperature coefficient of 0 to 50°C.	
8.4.6	The supply shall comply to at least the following standards: UL60950-1, TUV EN60950-1 approved EN55022 (CISPR22) Class B, EN61000-3-2,-3 EN61000-4-2,3,4,5,6,8,11, EN55024, light industry level, criteria A	

104 / 104 TR (2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.5	SAMPLE	STATE:
8.5.1	The following samples shall be made available for <u>viewing</u> at the Bidder's or Manufacturer's premises. The Bidder shall be responsible to make arrangements for samples to be viewed by at least six (6) personnel of the SAPS. The samples shall be able to view within the Gauteng Provincial region only. <ul style="list-style-type: none"> Rectifier and Battery Backup 	
8.5.2	Failure to submit a sample for viewing shall result in a non-acceptance of a Bidder's offer.	
8.5.3	The Bidder shall indicate where a full working sample containing all peripherals and equipment can be viewed and tested for evaluation purposes.	
8.5.4	It shall be the bidder's full responsibility to a range where such samples can be viewed and tested for evaluation purpose within the Gauteng Provincial region only.	
8.6	TIME SCHEDULE	STATE:
8.6.1	It is a requirement of this Bid that delivery and installation of ordered equipment shall commence not later than eight (8) weeks after an official order has been received by the successful Bidder, unless otherwise negotiated. Due to the various construction and installation time frames the contracted bidder for a specific service shall interact with the SAPS to determine exact time frames per site.	
8.6.2	Non-compliance to the above-mentioned delivery date as agreed upon per site will result in the enforcement of penalties in terms of General Conditions of Contract.	
8.7	DOCUMENTATION	STATE:
8.7.1	The successful bidder per equipment, service required shall ensure that the installation be thoroughly and accurately documented.	
8.7.2	Photostat copies of originals are unacceptable and the documentation must be in the English language.	
8.7.43	All equipment supplied shall be accompanied by an As-built hard copy and CD of the Installation where applicable.	
8.7.4	The Equipment offered including all additional equipment shall be supported by a full set of technical documentation, to assist SA Police Service Technical Personnel in the evaluation stage of the Bid. This documentation shall also allow the SA Police Service to maintain the rectifier offered. The technical documentation shall include at least the following:	
8.7.4.1	<ul style="list-style-type: none"> Detailed technical specifications. 	
8.7.4.2	<ul style="list-style-type: none"> Detailed wiring diagrams 	

105 / 104TR (22) 1

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.7.4.3	<ul style="list-style-type: none"> A detailed technical description of the operation of the equipment offered. 	
8.7.4.4	<ul style="list-style-type: none"> A complete list of components, including manufacturers part numbers, component numbers and descriptions. International ICN codes for components shall be included, if available. 	
8.7.4.5	<ul style="list-style-type: none"> A recommended spare parts' list shall be included by the Bidder. 	
8.8	REPAIRS UNDER GUARANTEE	STATE:
8.8.1	Bidders shall have qualified personnel and fully equipped workshop/manufacturing facilities available, to enable the Bidder to deliver a professional and speedy service to the SA Police Service during the guarantee period.	
8.8.2	Full maintenance and repairs shall be finalized by the successful Bidder, within one (1) week after faulty equipment has been identified and pointed out to the relevant bidder.	
8.8.3	Bidders must submit a name list accompanied with certified copies of technical qualifications applicable to this requirement for all qualified personnel under the Bidders control.	
8.8.4	Bidders shall state the details of spares in stock, workshops and any other relevant facilities under the Bidder's control throughout the RSA.	
8.8.5	Note that no offer will be accepted from a Bidder, if the Bidder has no qualified personnel, sufficient spares in stock and a fully equipped workshop. The Bidder shall provide full details of such personnel, spares and workshop for inspection by the SA Police Service during the evaluation stage if deemed necessary by the Bid Evaluation Committee.	
8.8.6	<p>Bidders shall report the following to the SA Police Service, Division Technology Management Services in writing on a monthly basis, for any repairs done to equipment during the duration of the contract and the guarantee period:</p> <ul style="list-style-type: none"> Date of fault report, Nature of the fault, & Parts replaced <p>Date Microwave Radio is handed back to the SAPS.</p>	
8.9	TECHNICAL TRAINING	STATE:
8.9.1	Each Bidder shall ensure that a comprehensive training schedule as per what is offered by each Bidder shall be available.	
8.9.2	The Bidder shall provide relevant training for equipment offered within this chapter.	

106 / 104TR (60)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
8.9.3	Cost of any training or relevant material offered shall be specified by the Bidder and included in the pricing schedule and stated in Appendix A of this chapter.	
8.10	AVAILABILITY OF SPARES	STATE:
8.10.1	Bidders shall certify in writing that they are capable to supply spares as per relevant Chapter for the equipment as asked for in this Bid document within two (2) weeks from receiving an order. If a Bidder is unable to comply with this, then its Bid shall be rejected.	
8.10.2	Failure of a Bidder to deliver any spares within this two (2) weeks at any stage of the contract period or within a period of five (5) years without good reason, shall result in penalty clauses as per General Conditions of Contract par 22 be enforced on the quoted prices of the spares.	
8.11	PROGRAMMING SOFTWARE	STATE:
8.11.1	All programming software needed to program specific equipment shall be included in the offer.	
8.11.2	Bidders shall state whether all relevant software will be made available to the SAPS for use without holding specific sections or parts of their software as proprietary software. If a Bidder is not willing to release all such software to the SAPS, the SAPS will not consider the Bid.	
8.11.3	All software shall have full usage facilities. Software with limited usage [e.g. 30 times usage only, etc.] or other factors which limit the SAPS technical staff to perform their duties shall not be accepted and shall result in non-acceptance of the Bid.	
8.11.4	If it should be determined at a later stage that the software delivered does not meet the requirements as described in par. 8.11, the Bidder shall be liable for all the costs to correct or replace that relevant software package.	
8.11.5	Bidders shall make available all upgrades on the software version delivered towards the SAPS, free of charge for at least up to five (5) years after the warranty period.	
8.12	DELIVERY	STATE:
8.12.1	The successful Bidder shall deliver the offered equipment to the address indicated on the official order or as decided between the parties. Cost for this delivery shall be quoted for as a per Province price and included in the Bid price	

107

104TR (2)

**SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION,
MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN
POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS**

	DESCRIPTION	Comply/Do not
8.12.2	The successful Bidder shall inform the SA Police Service, in writing (email) on a regular basis with respect to construction/installation when inspection can be done on services delivered. The equipment installed/constructed is inspected by a representative of the SA Police Service, Radio Communication Infrastructure Management at the High Site where installation/construction took place. A certificate of inspection and approval for the equipment/services delivered will be issued by the latter representative before payment can be processed.	

108

104TRC(2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
--	-------------	---------------

APPENDIX: A PART 08

8.14	CHAPTER 8 PRICING TABLE	
	MANDATORY PRICING INCLUDING VAT	PRICE
Note:	Pricing must be supplied as requested below — R0.00 prices will be deemed to be free of charge for unlimited volumes.	
8.14.1	PRICING FOR COMPLETE RECTIFIER AND BATTERY SYSTEM	
8.14.1.1	ICN - 5961T05032460 - Complete 48VDc rectifier with three (3) modules as per 8.2 of this chapter.	
8.14.1.2	ICN - 6130T05065310 - 48VDc rectifier module	
8.14.1.3	ICN - 6130T05065311 - 48VDc power Supply as per 8.4 of this chapter.	
8.14.1.4	ICN - 6135T05065292 - Minimum 110Ah Backup Battery x 4	
8.14.2	PRICING FOR ADDITIONAL EQUIPMENT ACCESSORIES	
Note:	Bidders must indicate additional equipment and information that should be taken note.	

109/104TRC(2)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
	CHAPTER 09	
9	TELECOMMUNICATION TEST INSTRUMENTS AND TOOLS	
9.1	SCOPE OF THE REQUIREMENT	STATE:
9.1.1	The bidder shall as part of this contract provide a detailed breakdown of all test tools and instruments required for the setup, installation, alignment and fault finding, for the Microwave equipment and solutions supplied on this contract in order for the SAPS technicians to be able to maintain and support the network once this contract comes to an end.	
9.1.2	The instrument offered shall have a full-featured portable test solution for Ethernet, Optical Transport Networking (OTN), Mobile Backhaul, Storage Area Networks, Synchronous Optical Network (SONET), Synchronous Digital Hierarchy (SDH) links and service testing.	
9.1.3	The instrument shall support IEEE 802.3bj clause 91 RS-FEC as required for SR4.	
9.1.4	The instrument shall have soft LED indicators. With a high resolution colour touch display.	
9.1.1	ETHERNET	STATE:
9.1.1.1	Shall be capable of performing 40 Gbps and 100 Gbps Ethernet testing.	
9.1.1.2	Shall have multi-stream testing minimum of 24 independent streams.	
9.1.1.3	Shall support Q in Q (VLAN stacking), MPLS, MPLS-TP, PBB, EoE	
9.1.1.4	Shall be able to measure service disruption.	
9.1.1.5	Shall be able to test Throughput at layer 2 and Layer 3 over the microwave link.	
9.1.1.6	Shall be able to transmit frequency offset to stress the network up to +/-150 ppm.	
9.1.1.7	Shall have a smart Loopback mode for layer 2 and Layer 3.	
9.1.1.8	Shall be capable of testing network traffic performance on copper and fibre in accordance with IEEE802.3ab standard.	
9.1.1.9	Test for open, shorts, miswires and split pairs in accordance with TIA-568 standard	

110/104 TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
9.1.1.10	Must be capable of performing load testing on live networks through switches, simulating such as CCTV and VoIP traffic.	
9.1.1.11	Verification of PoE/ PoE+ to display available voltage at device location.	
9.1.1.12	Must be capable of switch port identification via LLDP/CDP protocols.	
9.1.1.13	Must be able to check Ethernet connectivity at device location to 10/100/1000 Mbps.	
9.1.2	OPTICAL TRANSPORT NETWORKING (OTN)	STATE:
9.1.2.1	Shall have Ethernet over OTN testing.	
9.1.2.2	Shall have an external clock reference.	
9.1.2.3	Shall be able to perform Per-lane optical power and frequency measurements.	
9.1.2.4	Shall have Overhead monitoring and byte decoding capabilities.	
9.2	CABLE AND ANTENNA INSTALLATION TESTING	
9.2.1	The tool offered shall have the capabilities of testing and checking for breaks in the cable, poor seating of connectors, moisture, bad connector installation anywhere in the antenna and the transmission line.	
9.3	MICROWAVE RADIO ANTENNA ALLIGNMENT	
9.3.1	The tool offered shall allow technicians to perform antenna alignment as indicated as per the RF design and planning document.	
9.3.2	The tool must assist the technicians to perform proper site surveys with regards to line of sight checks for optimum link budget achievement even in high density urban and crowded environments.	
9.3.3	The tool must provide a report that includes the target coordinates, alignment data, geocoding, geolocation and line of sight photo validation. A tool similar to the 3Z RF Vision product.	
9.4	TRAINING	STATE:
9.4.1	Bidders shall ensure that detailed training is offered for the use of all instruments offered.	

111/104TR(22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
--	-------------	---------------

APPENDIX: A PART 09

9.5	CHAPTER 9 PRICING TABLE	
	MANDATORY PRICING INCLUDING VAT	PRICE
Note:	Pricing must be supplied as requested below — R0.00 prices will be deemed to be free of charge for unlimited volumes.	
9.5.1	PRICING FOR COMPLETE TEST INSTRUMENTS	
9.5.1.1	ICN - 5820T05080559 - All-in-one Ethernet and Optical Test Instrument as per 9.1 of this chapter.	
9.5.1.2	ICN - 5820T05080560 - Cable and Antenna Installation Test Instrument as per 9.2 of this chapter.	
9.5.1.3	ICN - 5820T05080561 - Microwave Radio Antenna Alignment Tool as per 9.3 of this chapter.	
9.5.1.4	ICN - 9825T05080562 - Training for use of instruments as per 9.4 of this chapter.	
9.5.2	PRICING FOR ADDITIONAL EQUIPMENT ACCESSORIES	
Note:	Bidders must indicate additional equipment and information that should be taken note.	

112/104TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
	CHAPTER 10	
10	OPTIONAL THREE (3) YEAR MAINTENANCE AND SUPPORT SERVICE LEVEL AGREEMENT (SLA)	
10.1	SCOPE OF THE REQUIREMENT	STATE:
10.1.1	Take note that the optional three (3) year Maintenance and support Service Level Agreement will only commence after the two (2) year warranty period expires with regard to the new equipment supplied within this Bid. However the bidder is required to maintain and support the entire existing SAPS owned Microwave Network upon commencement of the three (3) year contract period. This requirement is an option and will not form part of the total bid price, however bidders are requested to price for this option in the event that the SAPS choses to utilize this option.	
10.1.2	The bidder must quote for at least a Gold rated Service Level Agreement (SLA) which must be included in the total Bid price. The bidder will provide the Standard Services as set out below:	
10.1.2.1	Remote support services: Mean Time to (MTT) Respond and support within one (1) business hour nationally on a 24 Hour a day x 7 days a week x 365 days a year basis	
10.1.2.2	On-site support services: Mean Time to Repair (MTTR) and support within five (5) business hours nationally on a 24 Hour a day x 7 days a week x 365 days a year basis.	
10.1.2.3	Maintaining the equipment and ensuring a 99.999% availability of the SAPS Owned Microwave Network at all given time, parts and labour included.	
10.1.2.4	All existing equipment on the SAPS Owned Microwave Network will form part of this agreement.	
10.1.2.5	In the event that any of the equipment that forms part of the existing SAPS Owned Microwave Network requires repair or replacement the costing of such equipment will be in accordance with this contract.	
10.1.2.6	Ensuring that all equipment including the Network Monitoring software application is maintained to the latest software and firmware release, for the duration of the contract.	
10.1.2.7	All repairs and or replacement of any component within the SAPS Owned Microwave Network will be at the cost of the bidder for the entire duration of the warranty and maintenance contract period. Including labour.	
10.1.2.8	The bidder will provide unlimited telephonic support for the entire contract period.	

113/104TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
10.1.2.9	The bidder will maintain a detailed database of the entire network and provide a weekly report of all work done and or of any equipment replaced or swapped out. The report will also indicate the current status of the network.	

114 / 1104 TR (22) 

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

	DESCRIPTION	Comply/Do not
--	-------------	---------------

APPENDIX: A PART 10

10.2	CHAPTER 10 PRICING TABLE	
	MANDATORY PRICING INCLUDING VAT	PRICE
Note:	Pricing must be supplied for all lines in this section, R0.00 prices will be deemed to be free of charge for unlimited volumes.	
10.2.1	PRICING FOR STANDARD THREE (3) YEAR MAINTENANCE AND SUPPORT SERVICE LEVEL AGREEMENT (SLA)	
10.2.1.1	ICN - 9825T05080563 - Three (3) year maintenance and support Service Level Agreement as per 10.1 of this chapter.	

115 / 104 TR (22)

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

APPENDIX B- TRACK RECORD

116/104780

SPECIFICATION NUMBER 2713/22

SPECIFICATION: FOR THE SUPPLY, DELIVERY, PLAN, DESIGN, IMPLEMENTATION, MAINTENANCE AND SUPPORT OF TRANSMISSION EQUIPMENT FOR THE SOUTH AFRICAN POLICE SERVICE NATIONALLY FOR A PERIOD OF THREE (3) YEARS

DESCRIPTION	Comply/Do not
-------------	---------------

SPECIFICATION APPROVAL PAGE:

End User Approval



Division Technology Management Services: Radio Communication Infrastructure Management
BRIGADIER/ GENERAL

Date: 2022/11/29

117/104TR(22)



THE NATIONAL TREASURY

Republic of South Africa



GOVERNMENT PROCUREMENT: GENERAL CONDITIONS OF CONTRACT

July 2010

118/104TR(2)

GOVERNMENT PROCUREMENT
GENERAL CONDITIONS OF CONTRACT
July 2010

NOTES

The purpose of this document is to:

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

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

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

119/104TR² (22)