

## TENDER DATA

<b>Project title:</b>	<b>Appointment of a Panel of service providers for supply, delivery, installation and support of IOT applications and platform for a period of Three (3) years with an option to extend for a further Two (2) years.</b>
<b>Bid no:</b>	<b>SENT/050/2025-26</b>

### 1. BACKGROUND

Sentech is a state-owned company and is the largest broadcasting signal distributor in South Africa. Sentech is a licensed Electronic Communications Network Service provider in South Africa. It currently operates many telecommunication networks for Satellite, Television, Radio, Internet and more. As such, Sentech is a global enabler of broadcasting and digital content delivery.

Sentech intends to appoint a panel of service providers for supply, delivery, installation and support of IOT applications and platform for a period of 3 years with an option to extend for a further Two (2) years. The IOT applications and platform will enable Sentech to meet customer and mandated requirements. The IoT service provisioning require the development of an IoT ecosystem which includes all the components that enable people, businesses, governments and consumers to connect to their IoT devices, using hardware that includes remote monitoring, dashboards, networks, gateways, analytics, data storage, and security.

### 2. SUBMISSION OF BIDS and CLOSING

- 2.1 This Bid closes on the date and time stipulated on the Notice and Invitation to Bid (SBD1). Bids can be submitted electronically via the eTender Portal and/or by hand to the tender box at Sentech Offices, Octave Road, Radiokop Ext 3, Honeydew, Johannesburg.
- Bidders that opt to deposit their bid documents in the tender box must do so on or before the closing date and time, during working hours only (08:30-15:30). No late submissions will be accepted.
  - Bidders who opt to submit via the Sentech eTender Portal ("the eTender Portal") are advised that the eTender Portal has a files size limit of 30MB. Bidders must upload their tender documents timeously. The eTender Portal is available 24hrs a day. No late submissions will be accepted.
  - It is incumbent on the bidder to ensure that their bids are submitted timeously via the selected method before the closing date and time. Sentech will not take any responsibility of any incomplete submissions or late tenders, for any reason whatsoever.
  - Telegraphic, telephonic, telex, facsimile, e-mail and late Bids will not be accepted.

This is a two-envelope system for Bid Evaluation. Bidders must submit their proposal and all supporting documentation in a sealed envelope, clearly marked as follows:

For manual submissions, Envelope One must consist of "Original Technical Proposal together with a soft copy in PDF format of an electronic medium e.g. USB etc. The soft copy will consist of a single PDF document containing the complete response. The envelope must contain all information and documents relating to the Bid. (Refer to list of returnable documents).

No Financial Information must be included in Envelope One.

Envelope Two "Original Financial Proposal" (Contract Date and Pricing schedule/schedule of rates as applicable) together with 1 copy of "Financial Proposal" together with a soft copy in PDF format of an electronic medium e.g. Compact Disk (CD), USB etc. The soft copy will consist of a single PDF document containing the complete Financial Proposal.

Bidders are required to place the sealed Envelope One together with the sealed Envelope Two into one sealed envelope or container. The sealed envelope or container must be marked with the following information:

For Attention:

- HEAD OF SUPPLY CHAIN MANAGEMENT
- BID REFERENCE NO: ##
- TECHNICAL AND FINANCIAL PROPOSALS
- INSERT CLOSING DATE AND TIME
- BIDDER'S NAME AND ADDRESS

Bidders that combine their Technical Proposal with the Financial Proposal (or any financial information) will be automatically disqualified and not be evaluated further.

The financial proposal will only be opened and evaluated should the technical proposal be found to be responsive, being that the technical proposal has met the minimum technical evaluation criteria that are set out in the Bid Documents.

The Bidders shall insert a table of contents and bind (ring bind or similar method) the proposal documents and verify the page numbers, as Sentech will not accept any liability with regard to any disputes arising from pages that are missing or duplicated in the aforementioned documents.

Bidders are required to complete and sign all the returnable documentation (refer to list of returnable documents) and initial all pages, drawings and brochures which are included in the reply as Sentech will not accept any liability with regard to any disputes arising from pages that are missing or duplicated in the aforementioned documents.

- a) Late submissions will not be considered.
- b) For online submissions via the e-Tender portal, submission requirements are directed by the system. Bidders must follow instructions in the Bidder's manual.

### **3. SIGN AND INITIAL**

Bidders are required to complete and sign the Bid Forms where required and initial the bottom of all pages, drawings and brochures which are included in the submission as Sentech will not accept any liability with regard to any disputes arising from pages that are missing or duplicated in the aforementioned documents.

Both original signatures and electronic signatures will be accepted.

### **4. COMPLETION OF BID DOCUMENTS**

Bidders must ensure that they complete all sections of the Bid Documents as per the requirements in the Bid.

Bidders must use only the Bid documents provided by Sentech. Photocopying of the Bid document is permitted however Bidders must not retype or redraft the Bid documents.

### **5. BID VALIDITY**

This Bid shall remain valid for a period of 90 days only. An extension of the Bid validity, if justified in exceptional circumstances, shall be requested in writing from all Bidders before the expiration of the 90-day period.

## 6. COSTS OF PREPARING THE BID SUBMISSION

Bidders shall bare all costs associated with the preparation and submission of the proposals. Sentech shall under no circumstances be held responsible or liable for any costs incurred during the bidding process.

## 7. ADMINISTRATIVE RESPONSIVENESS CRITERIA

Bidders are required to ensure that they meet all the Administrative Responsiveness Criteria.

## 8. BBBEE CODES AT SENTECH

Sentech complies with the codes of good practice as prescribed by the DTI, to advance Broad Based Black Economic Empowerment.

## 9. SUBCONTRACTING AS A CONDITION OF BID

The successful Bidder must subcontract a minimum of \_\_\_\_\_% of the value of the contract to \_\_\_\_\_(specify the designated group targeted).

## 10. TRANSFORMATION PLAN

A transformation plan is a record of activities an entity intends to undertake to improve its BBBEE Level through Ownership, Management and Control; Skills Development; Enterprise and Supplier Development and Socio-Economic Development.

Sentech reserves the right to request a BBBEE transformation plan with clearly defined timelines and milestones if the recommended Bidder does not meet Sentech's transformation goals. These milestones must be achieved over the term of the contract. This transformation plan must be submitted within 10 working days from the written request, failing which Sentech reserves the right to withdraw its appointment of the preferred recommended Bidder.

## 11. LOCAL PRODUCTION AND CONTENT

In the case of designated sectors, where in the award of Bids, local production and content is of critical importance, such Bids will contain a specific bidding condition that only locally produced goods, services or works or locally manufactured goods, with a stipulated minimum threshold for local production and content will be considered.

Does this requirement fall under any designated sector as prescribed by the DTI?	Yes	No
If yes, specify the sector		
Specify minimum threshold applicable		

\*Bidders must fill in the SBD6.2 for Local Content and Production

## 12. EVALUATION CRITERIA

The evaluation criteria are stipulated in 18 below. It is the Bidder's responsibility to ensure that it has responded to the evaluation criteria. Failure to meet the evaluation criteria will result in the Bidder not being evaluated further. Bidders must ensure that they have included all supporting documentation required to support their response to the Bid.

### **13. OBJECTIVE CRITERIA**

- 13.1 Sentech reserves the right not to award this tender to any Bidder or any of its directors or subcontractors who during the preceding five (5) years –
- 13.1.1 failed to perform satisfactorily on a previous project with Sentech or any other organ of state; or
  - 13.1.2 wilfully neglected, reneged on or failed to comply with any government, municipal or other public sector contract.
- 13.2. Sentech further reserves the right not to award this Tender to any Bidder or any of its directors or subcontractors who have been blacklisted by any organ of state or committed and/or charged in any court of law or similar tribunal or forum with any act of tax non-compliance, fraud, corruption and/or dishonesty of whatsoever nature.

### **14. AWARD OF BID/S**

Sentech may appoint one or more suppliers, in whole or in part, or not appoint any supplier/s at all, and/or cancel the Bid in its entirety, at Sentech's sole and exclusive discretion, in order to satisfy various needs which may be identified, and to manage certain risks associated with the supply of goods or services specified in respect of the Bid.

### **15. ALTERNATIVE/SUBSTITUTE PRODUCTS**

In the case of contracts and/or panels, Sentech shall be entitled to consider and accommodate product upgrades during the tenure of the contract and/or panel. Bidders are required to bring all such developments to the attention of Sentech for approval.

### **16. BRIEFING SESSION**

Should there be a compulsory briefing session for this Bid, Bidders must ensure that they attend the briefing session and sign the attendance register, as non-attendance or failure to sign the attendance register will automatically disqualify a Bidder from submitting a proposal for this Bid.

All questions raised by Bidders post the briefing session will be consolidated and shared with all Bidders at least seven (7) calendar days prior to closing.

### **17. CLARIFICATION**

Enquiries related to Bid documents may be addressed to the Bid Administrator and Supply Chain Official as stated in SBD 1 Notice and Invitation to Bid.

## 18. BID EVALUATION METHOD

This Bid will be evaluated as described in the table below.

<p><b># 80/20 One envelope system will be followed for technical evaluation.</b></p>	<ol style="list-style-type: none"> <li> <p><b>1. Stage 1 – Administrative Responsiveness Evaluation</b></p> <p>All the Technical Proposals will be evaluated against the <b>Administrative responsiveness requirements</b> as set out in the list of returnable documents.</p> </li> <li> <p><b>2. Stage 2 –Technical Evaluation</b></p> <p>#All Bidders that qualify based on the administrative responsiveness requirements will be evaluated against the Mandatory and Functional Evaluation Criteria. The Mandatory and Functional Evaluation Criteria is applicable to all bidders who have selected the section/s they are bidding for on <b>TABLE 1</b>. The Mandatory and Functional Evaluation Criteria must be responded to by the bidder for the specific selected option. <b>(Section A, B, C, D, E, F, G, H, I).</b></p> <p>Only bidders that complied in full to <b>ALL the Mandatory Criteria</b> will be scored against functional evaluation criteria per section. Only bidders that meet <b>minimum qualifying score on functional evaluation criteria</b> per section will be evaluated further <b>(Section A, B, C, D, E, F, G, H, I).</b></p> </li> <li> <p><b>3. Stage 3 – Risk Assessment</b></p> <p>Bidders complying with Stage 2, will be evaluated against the Risk Assessment. The evaluation committee reserves the right to conduct a risk assessment on all preliminary and short-listed panellist to establish and assess capacity and risk level to Sentech if a bidder is to be appointed to deliver services.</p> </li> <li> <p><b>4. Stage 4 – Panel Appointment</b></p> <p>Bidders who fully comply with the Mandatory Criteria and obtain the minimum threshold points in the Functional Criteria will be appointed onto a panel of services providers for supply, delivery, installation and support of IOT applications and platform for a period of Three (3) years with an option to extend for a further Two (2) years. Sentech at its sole discretion, have the right to not appoint bidders onto the panel.</p> </li> </ol>
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## 19. ADMINISTRATIVE RESPONSIVENESS REQUIREMENTS

To be administratively responsive, Bidders must ensure that they meet all the below mentioned criteria. Bidders that do not meet all the below mentioned criteria may not qualify to be awarded the Bid. Sentech reserves its rights in respect of the below criteria.

- Complete and return all documentation stipulated in the LIST OF RETURNABLE DOCUMENTS.
- All correspondence must be in English.
- Bidders must fill in all sections of this document (where applicable).
- **BLACK INK** must be used when completing the Bid documents.
- Bidders must use only the Bid documents provided by Sentech. Photocopying of the Bid document is permitted however Bidders must not retype or redraft the Bid documents.
- All corrections must be initialled. The use of corrective fluid is strictly prohibited.
- Bidders are required to fill in and sign the Bid Forms and initial all pages, drawings and brochures which are included in the reply as Sentech will not accept any liability with regard to any disputes arising from pages that are missing or duplicated in the aforementioned documents.
- Bidders must complete an attendance register at each compulsory site meeting attended.
- Appointment of a Bidder will be subject to signing, declaration and submission of SBD 1, 3.1, 3.2, 3.3, 4, 5, 6, 1, 6.2 8, and 9 depending on applicability.
- Complete and sign the Contract Data.
- Should this be a 2 envelope or 2 stage system, Bidders **MUST** separate the technical proposal from their financial proposal. The technical and financial proposals must be placed in two separate sealed envelopes.

## 20. AUTOMATIC DISQUALIFICATION

Sentech reserves the right to automatically disqualify Bidders from being awarded this Bid. The following will lead to automatic disqualification:

- Failure to submit a financial proposal, if required.
- The Bidder is or has been involved in any act of corruption or fraud or bribery or collusion or attempt to influence any employee of Sentech to award this Bid or any other Bid to it.

## 21. TECHNICAL RESPONSIVENESS COMPLIANCE

The Technical Evaluation will encompass evaluation of:

- Mandatory Criteria
- Functional / Technical Criteria

## 22. TECHNICAL EVALUATION CRITERIA

The Technical evaluation criteria will have nine (9) sections as listed below **on the table**, bidders to tick which category they are bidding for: each section will be treated individually bidders who respond to each sections requiring IoT applications must provide a turnkey solution, comprising of hardware, connectivity/communication and platform. We expect a turnkey solution to be providing the below components:

**Data Collection:** sensors or devices that gather data such as asset's location, movement, and condition, such as temperature or humidity.

**Connectivity:** The data is transmitted to a cloud-based platform via IoT-specific networks e.g. LoRaWAN, NB-IoT, Internet etc.

**Platform:** A centralized software or cloud platform that provides real-time visibility, allowing users to set customized alerts and access reports remotely of the collected data.

After the panel appointment, we reserve the right to choose one or more of each component offered on turnkey solution individually.

**Table 1:** Technical evaluation selection/s for bidders.

SECTION	PANEL	PLEASE INDICATE (YES/NO)
SECTION A	Smart Metering (Utilities) <i>(as described under SECTION A of the document)</i>	
SECTION B	Smart Asset Tracking <i>(as described under SECTION B of the document)</i>	
SECTION C	Smart cities <i>(as described under SECTION C of the document)</i>	
SECTION D	E-health <i>(as described under SECTION D of the document)</i>	
SECTION E	Fleet management <i>(as described under SECTION E of the document)</i>	
SECTION F	Smart Energy Grid <i>(as described under SECTION F of the document)</i>	
SECTION G	Smart Agriculture <i>(as described under SECTION G of the document)</i>	
SECTION H	IOT Platform.	
SECTION I	Other IOT Used Cases.	

## 22.1. Mandatory Eligibility Criteria

Bidders to supply sufficient proof in form of manuals, datasheets, or letters from suppliers for ALL mandatory criteria and functional criteria(s) responses below. Each section will be treated individually. In the section below the compliance must be shown by a clear YES or No, reference to where to find the information and page number on the submission must be stated clearly.

## 22.2. Mandatory and Functional Criteria Evaluation

### 22.2.1. SECTION A: Mandatory and Functional Criteria for **Smart Metering (Utilities): Supply, delivery, installation and Support service providers - COMPULSORY** for bidders participating in SECTION A.

Smart metering requirements for this section required is a system that helps to control electricity, water etc. consumption levels with real-time data transmission capabilities. Smart metering technology enables utility meter data to be sent to the utility provider for billing purposes and to aid in the effective management of their grid and infrastructure. Predictive data can be amassed into users' consumption habits and issues such as leaks, in the case of water metering, can be identified easily

**Table A: Mandatory Criteria- Smart Metering (Utilities): Supply, delivery, installation and Support.**

<b>Mandatory Criteria- Smart Metering (Utilities): Supply, delivery, installation and Support</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Provide reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services.			Provide reference letter of service provided in relation to Smart metering IoT Hardware Supply and Support
A3	Bidder must have a direct agreement with the relevant OEM for supply and support.			Attach signed OEM agreement or letter.
A4	Product and solution provided must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH.			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A5	The system offered should adhere to industry specific regulations for the hardware offered. e.g. NRS049:2016 and NRS 009-6-10:2010			Provide datasheet indicating standards the system complies with.
A6	All equipment, devices and systems provided must have ICASA type approval for the applicable technology as required.			Provide ICASA approval certification or proof of submission to ICASA for approval.
A7	Offered system must adhere to the ETSI EN303 645			Provide confirmation that offered ETSE EN303 645 compliant

**NOTE: Bidders that do not comply with all the above criteria will not be evaluated further.**



**Table B:** Functional Criteria- Smart Metering (Utilities): Supply, delivery, installation and Support.

Functional Criteria- Smart Metering (Utilities): Supply and Support service providers					
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Reference page number in your proposal	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	Provide offered products warranty period (warranty period: minimum 12 months = <b>10 points</b> . > 12 months = <b>15 points</b> ).			Provide warranty period	15
B2	Bidders to state the number of projects they have provided smart metering for.  1 to 2 Project = <b>1 points</b> . 3 to 4 projects = <b>5 points</b> . 5 and more = <b>10 points</b> .			Provide reference letters stating the services that were provided.	10
B3	Hardware should be able to integrate / interoperable with other IoT platform.			Provide the datasheet or a list of platforms the devices adhered to as evidence.	15
B4	Hardware should support remote firmware upgrades, especially to address security vulnerabilities. No upgrades = <b>0 points</b> , local upgrades = <b>5 points</b> and remote upgrades = <b>10 points</b> .			Provide datasheet and reference information supporting this requirement	10
B5	Provide an indication if offered hardware technology is <ul style="list-style-type: none"> <li>• <b>Low Power WAN = 5 points</b></li> <li>• <b>Bluetooth = 5 points</b></li> <li>• <b>Wi-Fi = 5 points</b></li> <li>• <b>Cellular = 5 points</b></li> <li>• <b>Other = 5 points</b></li> </ul>			Provide datasheet/brochure/manual that specify the offered network/ connectivity is technology body certified.	20
B6	Provide an indication if offered hardware is: <ul style="list-style-type: none"> <li>• <b>Sensors Only</b> can be offered and supported. (= <b>10 points</b>).</li> <li>• <b>Sensor &amp; Actuator Only</b> can be offered and supported. (Purpose: Actuators enable intervention in physical reality.</li> </ul>			Provide datasheet/brochure/manual supporting this requirement	30

Functional Criteria- Smart Metering (Utilities): Supply and Support service providers					
	<p>Combination of sensors and actuators enable the control of the physical world.) (= 10 points)</p> <ul style="list-style-type: none"> <li>• <b><u>Gateway and Data Acquisition Systems</u></b> <b><u>Only</u></b> can be offered and supported. (Purpose: Internet gateways and Data Acquisition Systems (DAS) Provide connection to the sensor &amp; actuator network through Wi-Fi and wired Local Area Networks (LAN's) which digitize and aggregate the data for further analysis.) (= 10 points)</li> </ul>				
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

**22.2.2. SECTION B: Mandatory and Functional Criteria for Smart Asset Tracking: Supply, delivery, installation and Support - COMPULSORY** for bidders participating in SECTION B.

Smart Asset Tracking is separated from Fleet Management for this tender to acquire bidders who specialise on the different fields. In the context of this tender smart asset tracking refers to bar codes, RFID's, small tags with or without GPS that tracks individuals in buildings, movable assets or equipment in building or value chain fitted with batteries not necessarily in vehicles or fleet. The intention of the application use case should be to enhance visibility, improve operational efficiency, reduced human error, increase productivity and strategic decision-making through real-time data but not limited to the qualities counted here.

**Table A:** Mandatory Criteria- Smart Asset Tracking: Supply, delivery, installation and support.

<b>Mandatory Criteria- Smart Asset Tracking: Supply, delivery, installation and Support</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services.			Provide reference letter of the service provided in relation to Smart Asset tracking.
A3	Bidder must have a direct agreement with the relevant OEM for supply and support.			Attach signed OEM agreement or letter.
A4	Product and solution provided must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH.			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A5	The offered system should adhere to industry specific regulations for the application offered.			Provide datasheet indicating standards the system complies with.
A6	All equipment, devices and systems provided must have an ICASA type approval for the applicable technology as required.			Provide ICASA approval certification or proof submission to ICASA for approval
A7	The system hardware offered must adhere to the ETSI EN303 645 and platform to ISO 27001.			Provide confirmation of compliance
A8	Communication/ Connectivity service should be based on internationally recognized communication standards and protocols.			Provide statement of compliance for the type of communication

**NOTE: Bidders that do not comply with all the above criteria will not be evaluated further.**

**Table B:** Functional Criteria- Smart Asset Tracking: Supply, delivery, installation and support.

Functional Criteria- Smart Asset Tracking Supply and Support service providers					
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Reference page number in your proposal	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	Provide offered products warranty period (warranty period: 6 Months = <b>3 points</b> ; 12 Months = <b>10 points</b> ; > 12 months = <b>15 points</b> )			Provide warranty period	15
B2	Bidders to state the number of projects they have provided smart asset tracking for.  1 to 2 Project = <b>1 points</b> .  3 to 4 projects = <b>5 points</b> .  5 and more = <b>10 points</b> .			Provide reference letters stating the services provided.	10
B3	Hardware should be able to be integrated/ interoperable with any other IoT platform.			Provide datasheet/manual/brochure or a list of platforms that the devices adhered to as evidence.	10
B4	Hardware should support remote firmware upgrades, especially to address security vulnerabilities. No upgrades = <b>0 points</b> , local upgrades = <b>5 points</b> and remote upgrades = <b>10 points</b> .			Provide datasheet/manual/brochure supporting this requirement.	10
B5	Indicate offered hardware technology connectivity  • <b>LPWAN = 3 points</b> .			Provide datasheet/manual/brochure that specify the offered network/ connectivity is technology body certified.	15

**Functional Criteria- Smart Asset Tracking Supply and Support service providers**

	<ul style="list-style-type: none"> <li>• <b>Bluetooth = 3 points.</b></li> <li>• <b>Wi-Fi = 3 points.</b></li> <li>• <b>Cellular = 3 points.</b></li> <li>• <b>Other = 3 points.</b></li> </ul>				
B6	<p>Provide an indication if offered hardware is:</p> <ul style="list-style-type: none"> <li>• <b><u>Sensors Only</u></b> can be offered and supported. (= 5 points)</li> <li>• <b><u>Sensor &amp; Actuator Only</u></b> can be offered and supported. (Purpose: Actuators enable intervention in the physical reality. Combination of sensors and actuators enable the control of the physical world.) (= 5 points)</li> <li>• <b><u>Gateway and Data Acquisition Systems Only</u></b> can be offered and supported. (Purpose: Internet gateways and Data Acquisition Systems (DAS) Provide connection to the sensor &amp; actuator network through Wi-Fi and wired Local Area Networks (LAN's) which digitize and aggregate the data for further</li> </ul>			<p>Provide datasheet/manual/brochure supporting this requirement</p>	15

Functional Criteria- Smart Asset Tracking Supply and Support service providers					
	analysis.) (= 5 points)				
B7	Offered services should be available 24/7, 366/365 days a year.			Provide Letter of commitment on a company letterhead	5
B8	Offered system should provide for a dashboard with capabilities to allow: <ul style="list-style-type: none"> <li>• Real time monitoring of data = <b>2 points</b>.</li> <li>• Customizable according to use case = <b>2 points</b>.</li> <li>• User interface available on web = <b>1 point</b> &amp; mobile application = <b>1 point</b>.</li> <li>• White labelling = <b>2 points</b>.</li> <li>• Visualization as graphs, maps, tables, time series etc = <b>2 points</b>.</li> </ul>			Provide a datasheet/manual/brochure specifying features that are supported.	10
B9	That offered system should have capabilities to do data analytics, assist with insights, make better decisions, transform and enrich data received from the IoT systems.			Provide a datasheet/ brochure/manual/ letter of commitment with a list of features that are supported	5
B10	That platform should have capabilities to securely store data for a minimum of 12 months. The stored data should be indexed, accessible and readily available to applications for use.			Provide a datasheet/ brochure/manual/ letter of commitment and the maximum time the offered system stores data	5
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

### 22.2.3. SECTION C: Mandatory and Functional Criteria for **Smart Cities: Supply, delivery, installation and Support - COMPULSORY** for bidders participating in SECTION C.

A requirement for this section is a smart city solution that can collect and analyse data from IoT sensors and other related hardware, it should sense the environment so that the customer can decide how and when to act. Some actions that can be performed using data to e.g., manage traffic, parking, water supplies, efficient lighting, waste garbage collection and disposal system, cut pollution and make better use of infrastructure and keep citizens safe and clean.

**Table A:** Mandatory Criteria- Smart Cities: Supply, delivery, installation and Support.

<b>Mandatory Criteria- Smart Cities: Supply, delivery, installation and Support.</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services			Provide reference letter of the service provided in relation to Smart Cities.
A3	Bidder must have a direct relationship with the OEM.			Attach signed OEM agreement or letter.
A4	Product and solution provided must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH.			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A5	All equipment, devices and systems provided must have an ICASA type approval for the applicable technology as required.			Provide ICASA approval certification or proof submission to ICASA for approval
A6	Offered system must adhere to the ETSI EN303 645.			Provide confirmation of compliance.

**NOTE:** Bidders that do not comply with all the above criteria will not be evaluated further.

**Table B.** Functional Criteria- Smart Cities: Supply, delivery, installation and Support.

Functional Criteria- Smart Cities: Supply, delivery, installation and Support.					
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Reference page number in your proposal	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	Provide offered products warranty period (warranty period: minimum 12 months = <b>10 points</b> , > 12 months = <b>15 points</b> ).			Provide warranty period	15
B2	Bidders to state the number of projects they have provided smart city use cases for. 1 to 2 Project = <b>1 points</b> . 3 to 4 projects = <b>5 points</b> . 5 and more = <b>10 points</b> .			Provide reference letters stating the services provided.	10
B3	Devices should support remote firmware upgrades, especially to address security vulnerabilities. No upgrades = <b>0 points</b> , local upgrades = <b>5 points</b> and remote upgrade = <b>10 points</b>			Provide datasheet/manual/ brochure supporting this requirement	10
B4	Hardware should be able to be integrated/ interoperable with any other IoT platform.			Provide datasheet/manual/ brochure or a list of platforms the devices adhered to as evidence.	15
B5	Provide an indication if the bidder can offer any of the listed e.g. smart buildings, water management, waste management, education, smart street lighting, air and noise pollution monitoring.  1 = <b>5 points</b>  2 = <b>10 points</b>  3 and more = <b>20 points</b>			Provide list of use cases and portfolio of evidence supporting this requirement  e.g. presentation or brochure	20



B6	<p>Provide an indication if the bidder can offer smart crime prevention solution which include, for example, image recognition applications, alarms, advanced surveillance and monitoring as a service.</p>			<p>Provide a portfolio of evidence supporting this requirement</p> <p>e.g. presentation or brochure</p>	15
B7	<p>Provide an indication if offered hardware is:</p> <ul style="list-style-type: none"> <li>• <b><u>Sensors Only</u></b> can be offered and supported. (= 5 points)</li> <li>• <b><u>Sensor &amp; Actuator Only</u></b> can be offered and supported. (Purpose: Actuators enable intervention in the physical reality. Combination of sensors and actuators enable the control of the physical world.) (= 5 points)</li> <li>• <b><u>Gateway and Data Acquisition Systems Only</u></b> can be offered and supported. (Purpose: Internet gateways and Data Acquisition Systems (DAS) Provide connection to the sensor &amp; actuator network through Wi-Fi and wired Local Area Networks (LAN's) which digitize and aggregate the data for further analysis.) (= 5 points)</li> </ul>			<p>Provide datasheet/manual/ brochure supporting this requirement</p>	15
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

**22.2.4. SECTION D: Mandatory and Functional Criteria for E-Health: Supply, delivery, installation and Support - COMPULSORY** for bidders participating in SECTION D.

The requirements for E-Health entails the use of digital technology, such as computers, mobile devices, and the Internet, to deliver and manage health care information and services. Examples of eHealth include electronic medical records, telemedicine, patient portals (secure websites), mobile health applications (apps), wearable health tracking and monitoring devices, and online health education **resource**.

**Table A: Mandatory Criteria- E-Health: Supply, delivery, installation and Support.**

<b>Mandatory Criteria- E Health: Supply, delivery, installation and Support</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services.			Provide reference letter or project of similar or equivalent service provided in relation to E-Health Supply and Support service.
A3	Bidder must have a direct relationship with the OEM.			Attach signed OEM agreement or letter.
A4	Product must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH.			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A5	All equipment, devices and systems provided must have an ICASA type approval for the applicable technology as required.			Provide ICASA approval certification or proof submission to ICASA for approval
A6	Offered system must adhere to the ETSI EN303 645.			Provide confirmation that the system offered is ETSE EN303 645 compliant.
A7	Offered system must adhere to HPCSA Telehealth Guidelines. <b>See Annexure A.</b>			Provide confirmation or letter of Commitment stating compliance on a company letterhead.

**NOTE: Bidders that do not comply with all the above criteria will not be evaluated further.**

**Table B.** Functional Criteria- E Health: Supply, delivery, installation and Support.

Functional Criteria- E Health: Supply, delivery, installation and Support					
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Reference page number in your proposal	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	Provide offered products warranty period (warranty period: minimum 12 months = <b>10 points</b> , > 12 months = <b>15 points</b> ).			Provide warranty period	15
B2	Bidders to state the number of projects they have provided E- health solutions for. 1 to 2 Project = <b>1 points</b> 3 to 4 projects = <b>5 points</b> . 5 and more = <b>10 points</b> .			Provide reference letters stating the services were provided	10
B3	Devices should support remote firmware upgrades, especially to address security vulnerabilities. No upgrades = <b>0 points</b> , local upgrades = <b>5 points</b> and remote upgrades = <b>10 points</b> .			Provide datasheet/manual/ brochure supporting this requirement	10
B4	Hardware should be able to be integrated/ interoperable with any other IoT platform.			Provide datasheet/manual or a list of platforms the devices adhered to as evidence.	10
B5	Provide an indication if the bidder can offer any of the listed e.g. Telehealth, Health monitoring systems, Health monitoring platform and IOT medical devices.  1 = <b>5 points</b> 2 = <b>10 points</b> 3 or more = <b>20 points</b>			Provide a list of use cases and portfolio of evidence supporting this requirement.  e.g. presentation or brochure.	20

Functional Criteria- E Health: Supply, delivery, installation and Support					
B6	Provide an indication if devices offered can be used on different E-health applications.			Provide a list of applications the device has been used on, as portfolio of evidence. e.g. presentation or brochure.	15
B7	That platform should have capabilities to securely store data for a minimum of 12 months. The stored data should be indexed, accessible and readily available to applications for use.			Provide a datasheet/manual brochure/ letter of commitment and the maximum time the offered system stores data.	20
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

**22.2.5. SECTION E: Mandatory and Functional Criteria for Fleet Management devices: Supply, delivery, installation and Support- COMPULSORY** for bidders participating in SECTION E.

Fleet Management Tracking is separated from Smart Asset Tracking for this tender, to acquire bidders who specialise on the different fields. In the context of this tender, Fleet management refers to a system that coordinates business's fleet of vehicles and machinery to enhance efficiency, reduce costs, and ensure safety and compliance. The intension of the application is to find innovative fleet management solutions that can manage cars, vans, motor bikes, trucks, specialist vehicles (such as mobile construction machinery), forklifts and trailers that will be managed and monitored via a platform or app with the use of smart tracking devices.

**Table A: Mandatory Criteria- Fleet Management devices: Supply, delivery, installation and Support.**

<b>Mandatory Criteria- Fleet Management devices: Supply, delivery, installation and Support</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services.			Provide reference letter of the services offered in relation to Fleet Management devices Supply and Support.
A3	Bidder must have a direct relationship with the OEM for supply and support.			Attach signed OEM agreement or letter.
A4	Product must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH.			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A5	All equipment, devices and systems provided must have an ICASA type approval for the applicable technology as required			Provide ICASA approval certification or proof submission to ICASA for approval.
A6	Offered wireless devices fitted with GPS must support multiple GPS systems.			Provide datasheet/manual/brochure that indicates which GPS systems are supported.
A7	Offered wireless devices must be registered with the <b>Motor Vehicle Security Association of South Africa (VESA)</b> and must be <b>SABS</b> approved.			Provide VESA registration letter and the SABS approval letter.

**NOTE: Bidders that do not comply with all the above criteria will not be evaluated further.**

**Table B:** Functional Criteria- Fleet Management: Supply, delivery, installation and Support.

Functional Criteria - Fleet Management: Supply, delivery, installation and Support					
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Reference page number in your proposal	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	The device should include a backup battery that can power the device when there is no supply (7 to 30 day = <b>5 points</b> ; more than 30 days = <b>10 points</b> )			Provide datasheet/manual/ brochure indicating a period the battery will last.	10
B2	Hardware should be able to be integrated/ interoperable with any other IoT platform.			Provide datasheet/manual/ brochure or a list of platforms the devices adhered to as evidence.	10
B3	Devices with processing capabilities and capacity should support remote/local firmware upgrades, especially to address security vulnerabilities, adding and deleting of assets (local = <b>5 points</b> ; remote = <b>5 points</b> )			Provide datasheet/manual/ brochure supporting this requirement	10
B4	Provide indication what different types of <u>communication technologies</u> are used for the offered Tracking devices.  (Satellite = <b>3 points</b> Cellular = <b>3 points</b> , LPWAN = <b>3 points</b> )			Provide datasheet/manual/ brochure indicating the communication technologies.	9
B5	Fleet Management should provide the following Functionalities:  Asset Management (e.g. Device Onboarding & Control) - ( <b>2 points</b> )  Location and Geo-Spatial Management (e.g. Zone Management) - ( <b>2 points</b> )			Provide a portfolio of evidence supporting this requirement  e.g. presentation or brochure	12

	Operational Data Logging (e.g. Trip Logbook) - <b>(2 points)</b>  Alerts and Notifications (e.g. Device Notifications) - <b>(2 points)</b>  Data Visualization and Export (e.g. Downloadable Reports) - <b>(2 points)</b>  Automation (e.g. safely remotely switching on off engine) - <b>(2 points)</b>				
B6	Connectivity should be available 24/7 365/366 days = <b>11 points</b>			Provide datasheet/manual/ brochure indicating this requirement.	11
B7	Immediate Response (Safety & Crash Alerts = <b>5 points</b> ; 24/7 365/366 days; Roadside assistance = <b>5 points</b> ; medical assistance = <b>5 points</b> ; SAPS / private security immediate Response = <b>5 points</b> )			Provide a portfolio of evidence supporting this requirement  e.g. presentation or brochure  and the list of emergency contacts.	20
B8	Location accuracy (less than 10 meters = <b>8 points</b> .  More than 10 meters = <b>4 points</b> )			Provide datasheet/manual/ brochure indicating this requirement.	8
B9	WEB page and an application compatible on Smart Phones  (WEB page = <b>5 points</b> ; Smart Phone App = <b>5 points</b> )			Provide a portfolio of evidence supporting this requirement  e.g. presentation or brochure	10
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

**22.2.6. SECTION F: Mandatory and Functional Criteria for Smart Grid: Supply, delivery, installation and Support. COMPULSORY** for bidders participating in SECTION F.

A smart grid is a modern innovative electrical infrastructure that utilizes ICT and digital networks to collect data on electricity production and consumption. The intension of the application is to find innovative solutions that improves upon legacy grid systems through the addition of monitoring, measurement, and automation. The smart grid system comprises of; Grid Monitoring Equipment's devices, Clean/renewable energy solutions, Energy Storage solutions, Control and Management capabilities over a remote platform.

**Table A.** Mandatory Criteria- Smart Grid: Supply, delivery, installation and Support.

<b>Mandatory Criteria- Smart Grid: Supply, delivery, installation and Support</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services.			Provide reference letter of the service provided in relation to Smart Grid (Software, Hardware Supply and Support.
A3	Product must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH.			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A4	Bidder must have a direct relationship with the OEM.			Attach signed OEM agreement or letter.
A5	All equipment, devices and systems offered must have ICASA type approval for the applicable technology utilized.			Provide ICASA approval certification or proof submission to ICASA for approval
A6	The company must register with Eskom (Grid Code custodian) subject to the approval of the National Energy Regulator of South Africa			Provide proof of registration or a proof of application for registration.

**NOTE: Bidders that do not comply with all the above criteria will not be evaluated further.**



**Table B:** Functional Criteria for Smart Grid: Supply and Support service providers.

Functional Criteria - Smart Grid: Supply and Support service providers.				
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	Provide offered products warranty period (warranty period: 12 Months = <b>2 points</b> ; 12 to 24 Months = <b>5 points</b> ; more than <b>24 Month = 10</b> )		Provide warranty period	10
B2	Hardware should be able to be integrated/ interoperable with any other IoT platform = <b>14 points</b>		Provide datasheet/manual/ brochure or a list of platforms the devices adhered to as evidence.	14
B3	Devices with processing capabilities and capacity should support remote/local firmware upgrades, especially to address security vulnerabilities, adding and deleting of Grid Monitoring Equipment. (local = <b>5 points</b> ; remote = <b>5 points</b> )		Provide datasheet/manual/ brochure supporting this requirement	10
B4	<b>Energy Management System</b> (EMS to optimize energy usage and reduce costs while enhancing sustainability plus dashboard overview, set alerts/notifications = <b>10 points</b> and on request downloadable Reports, daily, weekly, monthly etc.) = <b>10 points</b>		Provide datasheet/manual/ brochure indicating that these requirements are supported also showing data and analytics.	20
B5	Grid Monitoring Equipment: Grid line powered = <b>2 points</b> . Solar panel array = <b>3 points</b> . Rechargeable battery = <b>3 points</b> .		Provide datasheet/manual/ brochure of devices supporting this requirement.	8
B6	Ultra-bright high intensity LEDs for visibility and system status (for Grid Monitoring Equipment) = <b>6 points</b>		Provide datasheet/manual/ brochure supporting this requirement.	6
B7	The bidder must indicate if they can provide alternative Clean Energy Supply ( <u>solar</u> , <u>wind</u> , <u>hydro</u> , <u>geothermal</u> (earth's heat), and <u>biomass</u> (organic matter)) 1 = <b>2 points</b> 2 = <b>4 points</b> 3 or more = <b>6 points</b>		Provide supporting documents like reference letter on where it was implemented or proof of registration as an alternative power provider.	6
B8	The bidder must indicate if they can provide <b>Energy Storage</b> (energy storage solutions that are fully integrated with the smart grid network and the current electricity grid, and guarantees		Provide supporting documents like reference letter on where it was implemented	6

	constant back-up power supply in the event of loadshedding) = <b>6 points</b>			
B9	Indicate the Connectivity technology used (GPRS, LTE, LoRaWAN and Vsat)  1 = <b>10 points</b>  2 or more = <b>20 points</b>		Provide datasheet/manual/ brochure indicating the communication technologies.	20
<b>Total Number of Points (Maximum = 100)</b>				<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

## 22.2.7. SECTION G: Mandatory and Functional Criteria for **Smart Agriculture Supply and Support service providers- COMPULSORY** for bidders participating in SECTION G.

The Smart Agriculture system is a comprehensive, end-to-end Internet of Things (IoT) solution designed to modernize farming through data-driven decision-making. It leverages a network of long-range, low-power wireless sensors deployed in the field to continuously monitor critical conditions like soil moisture, temperature, and crop health; the core of the system is a secure, cloud-based platform that collects, analyses, and visualizes this data. It provides farmers with actionable insights, automated alerts, and historical trend analysis via a user-friendly dashboard, enabling precise control over irrigation, resource usage, and overall farm management.

**Table A:** Mandatory Criteria- Smart Agriculture Supply, delivery, installation and Support.

<b>Mandatory Criteria- Smart Agriculture Supply, delivery, installation and Support</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services			Provide a reference letter for the service provided in relation to Smart Agriculture Supply and Support.
A3	The bidder must have a direct agreement with the relevant OEM for supply and support			Attach signed OEM agreement or letter.
A4	Product must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A5	All equipment, devices and systems offered must have ICASA type approval for the applicable technology utilized			Provide ICASA approval certification or proof submission to ICASA for approval
A6	The device architecturally shall be designed for low power operation and energy efficiency and shall adhere to IEEE 802.15.4 or ISO/IEC 14543-3-10 standards.			Provide datasheet/manual/brochure as confirmation that the devices offered are IEEE 802.15.4 or ISO/IEC 14543-3-10 compliant.
A7	The system shall provide a secure, long-range field area network (FAN) for agricultural use, based on open standards (e.g. LoRa WAN)			Provide datasheet/manual/brochure and coverage maps, Security architecture diagram and List of supported open standards and protocol specifications.

**NOTE: Bidders that do not comply with all the above criteria will not be evaluated further.**

**Table B.** Functional Criteria- Smart Agriculture: Supply, delivery, installation and support.

Functional Criteria- Smart Agriculture Supply, delivery, installation and support.					
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Reference page number in your proposal	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	Provide offered products warranty period (warranty period: minimum 12 months = 10 points, > 12 months = 15 points).			Provide warranty period	15
B2	Devices should support remote firmware upgrades, especially to address security vulnerabilities. No upgrades = 0 points, local upgrades = 5 points and remote upgrades = 10 points.			Provide datasheet/manual/ brochure supporting this requirement and a security summary of the update mechanism.	10
B3	The device shall operate within its specified accuracy range across its entire rated environmental operating range (e.g., -20°C to +70°C). (Fails under stress conditions = 0 points, maintains accuracy within 80% of spec = 5 points, Maintains accuracy within 100% of spec = 10 points)			Provide the document of the test report showing performance under environmental stress testing. e.g. (IEC 60068 or IP rating certification report)	10
B4	The device shall be constructed with field-replaceable components (e.g., sensor probes, batteries) to extend its usable lifespan. Fully disposable unit = 0 points, User-replaceable battery = 5 points, User-replaceable sensors and battery = 10 points)			Provide the list of replaceable components (i.e. probes, batteries etc.) and instructions from the manual for safe replacement.	10

B5	<p>Provide an indication if offered hardware is</p> <ul style="list-style-type: none"> <li>• <b>Sensors Only</b> can be offered and supported. (=5 points)</li> <li>• <b><u>Sensor &amp; Actuator Only</u></b> can be offered and supported. (Purpose: Actuators enable intervention in physical reality. Combination of sensors and actuators enable the control of the physical world.) (= 5 points)</li> <li>• <b><u>Gateway and Data Acquisition Systems Only</u></b> can be offered and supported. (Purpose: Internet gateways and Data Acquisition Systems (DAS) Provide connection to the sensor &amp; actuator network through Wi-Fi and wired Local Area Networks (LAN's) which digitize and aggregate the data for further analysis.) (= 5 points)</li> </ul>			Provide datasheet/manual/ brochure supporting this requirement	15
B6	Platform must provide tools for historical data analysis and seasonal comparison for a minimum of 12 months (e.g., yield, water usage, sensor data).			Provide datasheet/manual/brochure showing data analysis from at least two different growing seasons or sensor data.	10
B7	Platform must provide integration or be interoperable with any other 3 <sup>rd</sup> party agriculture IoT platform (No integrations = 0 points, 1-2 pre-built integrations = 5 points, 3+ pre-built integrations or a flexible integration framework = 10 points)			Provide a list of officially supported third-party integrations and/or documentation for the integration framework	10
B8	Provide a list of typical latency/polling intervals of devices offered for probes/sensors, actuators			Provide datasheet/manual/brochure for technical specifications.	10

	and real time telemetry/video.				
B9	<ul style="list-style-type: none"> <li>No dedicated NMS provided; system relies on manual checks or raw data logs only. (Non-Compliant) = <b>0 points.</b></li> <li>Passive NMS provided. Displays list views of device status (Online/Offline) and basic signal indicators but lacks historical analysis or topology mapping = <b>5 points.</b></li> <li>Full FCAPS-aligned NMS provided. Includes Network Topology Maps, Historical RF Performance Analysis (RSSI/SNR trends), and Proactive Automated Alerting (SMS/Email/Webhook) for critical failures (e.g., Gateway Down, Low Battery, Signal Degradation). =<b>10 points</b></li> </ul>			Provide datasheet/manual/brochure for the network management functionalities.	10
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

## 22.2.8. SECTION H: Mandatory and Functional Criteria for IoT Platform: Supply, delivery, installation and Support. **COMPULSORY** for bidders participating in SECTION H.

An IoT platform is a software system that acts as a central hub for the Internet of Things, connecting devices, collecting and processing data, and enabling the management and analysis of connected systems. It serves as middleware, bridging the gap between the physical devices (like sensors and machines) and the applications that use their data. Key functions include device management, secure data ingestion and storage, communication protocol support, advanced data analysis, and integration with other enterprise systems to drive insights and automation.

**Table A:** Mandatory Criteria- IoT Platform: Supply, delivery, installation and Support.

<b>Mandatory Criteria- IoT Platform: Supply, delivery, installation and Support</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Platform should be hosted and supported in South Africa and should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A2	Bidder must have a track record of the offered services.			Provide a letter of reference for the platform offered.
A3	Bidder must be the owner of the offered platform.			Attach proof of ownership or letter of ownership on a company letter head.
A4	Product must include training and be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH			Attach a letter of commitment specifying the different types of support offered in the minimum period of 3 years.
A5	Offered system must adhere to ISO27001 or similar.			Provide confirmation of compliance
A6	Platform should be able to be integrated into any IoT systems via different operating systems and protocols.			Provide letter of commitment on a company letterhead stating compliance.

**NOTE: Bidders that do not comply with all the above criteria will not be evaluated further.**

**Table B:** Functional Criteria- IoT Platform: Supply and Support service providers.

Functional Criteria- IoT Platform: Supply and Support service providers					
Item No.	Description of functional criteria evaluation	Compliance (Yes/No)	Provide reference page number in your proposal	Proof of Compliance (Reference)	Score Per Functional Evaluation
B1	Platform should cater and allow for auto scalability based on:  A) Number of devices connected at a time = <b>5 points</b>  B) Amount of data coming into the platform = <b>5 points</b> .			Provide datasheet/manual/brochure stating how the platform scales to support this requirement.	10
B2	Platform should be able to be integrated with any existing IoT service through any network using MQTT = <b>2 points</b> , HTTP(S) = <b>2 points</b> , XMPP = <b>2 points</b> , DDS = <b>2 points</b> , AMQP = <b>2 points</b> , and REST/APIs = <b>2 points</b>			Provide datasheet/manual/brochure supporting this requirement	12
B3	Platform should be able to register IoT devices as individual = <b>4 points</b> and in bulk = <b>4 points</b> .			Provide datasheet/manual/brochure supporting this requirement	8
B4	Platform should allow for notifications or alerts on its performance and health status as well as that of systems connected to it e.g. deviations in device configurations, authentication, identities and authorization.			Provide datasheets / brochure / manual supporting this requirement	10
B5	Platform should enforce a level of authentication or authorization from any system connected to it in a form of certificates or encryption.			Provide datasheets / brochure / manual supporting this requirement	10
B6	The platform should have capabilities to securely store data for a minimum of 12 months. The stored data should be indexed, accessible and readily available to applications for use.			Provide datasheets / brochure / manual supporting this requirement	10
B7	The platform provided should allow for customizable reports in a readable format e.g. xml, csv, pdf etc.  Non customizable = <b>0 points</b> ; Downloadable reports = <b>5 points</b> ; Automated reports = <b>5 points</b> .			Provide datasheets / brochure / manual supporting this requirement	10



B8	The platform should have capabilities to do data analytics to assist with insights to make better decisions, transform and enrich data received from the IoT systems.			Provide datasheets / brochure / manual supporting this requirement	10
B9	<p>Offered platform should provide for a dashboard with capabilities to allow:</p> <ul style="list-style-type: none"> <li>Real time monitoring of data = <b>4 points</b></li> <li>Customizable according to use case= <b>4 points</b></li> <li>User interface available on web or mobile application.</li> <li>White labelling= <b>4 points</b></li> <li>Visualization as graphs, maps, tables, time series etc.= <b>4 points</b></li> </ul>			Provide datasheet/manual/brochure supporting this requirement	20
B10	Have a built-in billing engine with the capability to integrate with other billing systems or ERP.			Provide datasheet/manual/brochure supporting this requirement	10
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE: Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.**

**22.2.9. SECTION I: Mandatory and Functional Criteria Other IOT Used Case: Supply and Support service providers - COMPULSORY** for bidders participating in SECTION I.  
 Bidder to clearly provide the use that will be evaluated.

**Table A: Mandatory Criteria- Other IOT Used Cases Supply and Support service providers**

<b>Mandatory Criteria- Other IOT Used Cases: Supply and Support service providers</b>				
<b>Item No.</b>	<b>Description of mandatory criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Reference page number in your proposal</b>	<b>Proof of Compliance ATTACH PROOF - DOCUMENTATION</b>
A1	Provide use case name and description:			Provide a write up detailing the use case.
A2	Support should be immediately available in South Africa.			Provide letter of commitment on a company letterhead stating compliance.
A3	Bidder must have a track record of the offered services.			Provide reference letter of the service provided in relation to IOT Use case offered
A4	Bidder must have a direct agreement with the relevant OEM for supply and support.			Attach signed OEM agreement or letter.
A5	Product must be supported by the bidder for a minimum of 3 years from date of delivery to SENTECH			Attach a letter of commitment specifying the different types support offered in the minimum period of 3 years.
A6	The system offered should be interoperable .i.e. (able to be integrated to other systems).			Provide datasheet indicating standards the system complies with.
A7	All equipment, devices and systems utilized must have an ICASA type approval for the applicable technology is required.			Provide ICASA approval certification or proof submission to ICASA for approval
A8	Offered system must adhere to the ETSI EN303 645			Provide confirmation of compliance

**NOTE: Bidders that do not comply with all above criteria will not be evaluated further**

**Table B:** Functional Criteria -Other IOT Used Cases: Supply and Support service providers

<b>Functional Criteria -Other IOT Used Cases: Supply and Support service providers</b>					
<b>Item No.</b>	<b>Description of functional criteria evaluation</b>	<b>Compliance (Yes/No)</b>	<b>Provide reference page number in your proposal</b>	<b>Proof of Compliance (Reference)</b>	<b>Score Per Functional Evaluation</b>
B1	Provide offered products warranty period (warranty period: minimum 12 Months = <b>10 points</b> ; > 12 months = <b>20 points</b> )			Provide warranty period	20
B2	Bidders to state the number of projects they have provided the use case.  1 to 2 Project = <b>5 points</b>  3 to 4 projects = <b>10 points</b> .  5 and more = <b>20 points</b> .			Provide reference letters stating the services that were provided.	20
B3	Devices should support remote firmware upgrades, especially to address security vulnerabilities. No upgrades = <b>0 points</b> , local upgrades = <b>10 points</b> and remote upgrade = <b>20 points</b>			Provide a datasheet/ brochure/manual supporting this requirement	20
B4	Hardware provided should be able to be integrated or interoperable with any existing IoT platform.			Provide a letter of commitment	20
B5	That platform should have capabilities to securely store data for a minimum of 12 months. The stored data should be indexed, accessible and readily available to applications for use.			Provide a datasheet/ brochure /manual/ letter of commitment and the maximum time the offered system stores data	20
<b>Total Number of Points (Maximum = 100)</b>					<b>100</b>

**NOTE:** Total minimum qualifying functional score is 75 points. A bidder must score 75 at least points in total to be evaluated further. A bidder that does not meet the minimum score in each criteria will score a zero.

### 23. Risk assessment

All bids that pass the technical evaluation in **22.1** will undergo a risk assessment based on the following framework:

Criteria	Comments
e.g. Dishonesty in information presented	
Any additional information received from past references	
Financially and operational sustainability of the Bidder	

NB: Sentech may disqualify Bidders based on the outcome of the risk assessment.

### 24. Evaluation of Price and Preference

This Bid will be evaluated on a points system based on weighted average score for Price and Preference as per Preferential Procurement Framework Act of 2000 (Act 5 of 2000). Accordingly, either the 80/20 or 90/10 preference point system will apply and the highest acceptable Bid will be used to determine the applicable preference point system.

### 25. Preference Point allocation – 80/20 or 90/10

Price / Preference	Weighting (80/20)	Weighting (90/10)
<b>Preference:</b>	<b>20</b>	<b>10</b>
<b>Price:</b>	<b>80</b>	<b>90</b>
<b>Total must equal:</b>	<b>100</b>	<b>100</b>

Sentech will award preference points according to the following table:

Goal	Points (80/20)	Points (90/10)	Evidence required
Historically disadvantaged by unfair discrimination on the basis of Race	10	5	A valid BBBEE Certificate showing at least 51% black ownership
	5	3	A valid BBBEE Certificate showing at least 25.1 – 50% black ownership
	3	2	Black owned company showing at least 5 – 25% black ownership
	0	0	Below 5%
Historically disadvantaged by unfair discrimination on the basis of Gender (women)	8	4	A valid BBBEE Certificate showing at least 51% women ownership
	4	2	A valid BBBEE Certificate showing at least 25.1 – 50% women ownership
	2	1	A valid BBBEE Certificate showing at least 5-25% women ownership
	0	0	A valid BBBEE Certificate showing at less than 5% women ownership
Historically disadvantaged by unfair discrimination on the basis of disability	2	1	A doctor's note confirming disability or confirmation of disability from the Department of labour (EEA1 form) or equivalent
<b>Total Points</b>	<b>20</b>	<b>10</b>	

## 26. Price Calculation 80/20

The following formula will be used to calculate the points for price.

$$P_s = 80 \left[ \frac{1 - (P_t - P_{min})}{P_{min}} \right]$$

Where:

$P_s$	=	Points scored for price of bid under consideration
$P_t$	=	Rand value of bid under consideration
$P_{min}$	=	Rand value of lowest acceptable bid

## 27. Price Calculation 90/10

The following formula will be used to calculate the points for price.

$$P_s = 90 \left[ \frac{1 - (P_t - P_{min})}{P_{min}} \right]$$

Where:

$P_s$	=	Points scored for price of bid under consideration
$P_t$	=	Rand value of bid under consideration
$P_{min}$	=	Rand value of lowest acceptable bid

**28. Declaration of Authority**

The undersigned, who warrants that he / she is duly authorised to do so on behalf of the enterprise, confirms that the contents of this Bid Data is understood and all requirements will be adhered to.

Name of Bidder	Signature	Date	Designation

**TABLE 1: REFERENCES**

**Please complete the customer reference table and relevant Contact telephone number and attach reference letters.**

Customer		Service Provided	Contact Person	Contact no.	tel.	Contractual commencement date	Contractual completion date
1							
2							
3							
4							

5						
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<b>Name of Tenderer</b>	<b>Signature</b>	<b>Date</b>