Annexure A1

Terms of Reference

CSIR Network upgrade (design, provisioning, implementation, maintenance and support) for Five (5) Years

RFP No. 3551.1/29/09/2023

TABLE OF CONTENTS

- ***Glossary of terms***

Term	Description
OEM	The Original Equipment Manufacturer. Manufacturers of hardware or software
Vendor	A vendor brands a product and sells it directly to end users or through a channel like a distributor.
Distributor	Reseller of vendor products and services to primarily partners/suppliers.
Partner/Supplier	Reseller of vendor products and services to end customers, which may also be involved in the project management, designing, implementation, and integration of products and services to end customers.
CSIR User	A CSIR employee or Contracted employee tis granted access to the network.

- ***List of abbreviations and acronyms***

Abbreviation/ Acronym	Description
1RU	One Rack Unit
802.1x	IEEE Standard for port-based Network Access Control.
AAA	Authentication, authorisation, and accounting
AC	Alternating current.
AD	Active Directory.
ADC	Application Delivery Controller.
AI	Artificial Intelligence.
ALE	Automatic Link Establishment.
AP	Access Points.
ASIC	Application-Specific Integrated Circuit.
AWS	Amazon Web Services.
BFD	Bidirectional Forwarding Detection.
BYOD	Bring Your Own Device.
CE	Customer Edge.
CPU	Central Processing Unit.
DC	Direct current.
CSD	Central Supplier Database
DSCP	Differentiated Services Code Point.
DFS	Dynamic Frequency Selection.

Abbreviation/ Acronym	Description
D&S	Defence and Security.
DoS	Denial of Service.
DPI	Deep Packet Inspection.
DRAM	Dynamic Random-Access Memory.
DSL	Digital Subscriber Line.
EAP	Extensible Authentication Protocol.
ECT	Electronic Communications and Transactions
ESA	Enterprise and Solutions Architecture.
EST	Electronic Communications and Transactions Act 25 of 2002.
EVPN	Ethernet Virtual Private Network.
FRS	Functional Requirements Specification.
FT	Flow Table
FTE	Fault Tolerant Ethernet.
GB	Gigabytes.
GDPR	General Data Protection Regulation.
GRC	Governance, Risk and Compliance.
GRE	Generic Routing Encapsulation.
GUI	Graphic User Interface.
HA	High Availability.
HLD	High-Level Design
ICT	Information and Communications Technology.
IEC	International Electrotechnical Commission.
IEEE	Institute of Electrical and Electronics Engineers.
IGMP	Internet Group Management Protocol.
IoT	Internet of Things.
IP	Internet Protocol.
IP/TCP	Internet Protocol/Transmission Control Protocol.
IPS	Intrusion Prevention System.
ISIS	Intermediate System to Intermediate System.

Abbreviation/ Acronym	Description
ISO	Information Security Office.
LISP	Location Identifier Separation Protocol.
LLD	Low-Level Design.
LTE	Long-Term Evolution.
MACsec	Media Access Control security
MDM	Mobile Device Management
mGig	Multigigabit Ethernet
MISS	Minimum Information Security Standards.
MOTD	Message of The Day.
MPLS	Multiprotocol Label Switching.
MS	Microsoft.
MTTR	Mean time to resolve
MU-MIMO	multiple-input and multiple-output for multipath wireless communication.
MVPNs	Multicast VPNs.
N/A	Not Applicable.
N/AC/AX	Wi-Fi speed standards, now called Wi-Fi 4/5/6.
NAC	Network Access Control.
NAT	Network Address Translation.
NBASE-T	Standards for Ethernet over twisted pair at speeds of 2.5 and 5 Gbit/s.
NETCONF	Network Configuration.
NGO	Non-Governmental Organisation.
NT	National Treasury
ODFMA	Orthogonal Frequency Division Multiple Access.
OEM	Original Equipment Manufacturers
OS	Operating System.
POPIA	Protection of Access to Information Act 2 of 2002.
PAT	Port Address Translation.
PE	Provider Edge.
POE	Power Over Ethernet.

Abbreviation/ Acronym	Description
POPI	Protection of Personal Information Act 4 of 2013.
POPIA/GDPR	Protection of Personal Information Act/ General Data Protection Regulation.
PSE	Power Sourcing Equipment.
QoS	Quality of Service.
R&D	Research and Development.
RF	Radio Frequency.
RFC	Request for Comments.
RFP	Request for Proposal.
RFID	Radio-frequency identification.
RHEV	Red Hat Enterprise Virtualization.
RRM	Auto Radio Resource Management.
SANREN	South African National Research Network.
SATA	Serial Advanced Technology Attachment.
SCVMM	System Centre Virtual Machine Manager.
SDN	Software-Defined Networking.
SFP	Small Form-factor Pluggable.
SIEM	Security Information and Event Management.
SME	Subject Matter Expert.
SSD	Solid State Drive.
SSID	Service Set Identifier.
SSX	Streaming Statistics Export
UDP	User Datagram Protocol.
URS	User Requirements Specification.
UP	University of Pretoria.
USB	Universal Serial Bus.
VLANs	Virtual Local Area Networks.
VoIP	Voice over IP.
VPLS	Virtual Private LAN Service.
VPN	Virtual Private Network.

Abbreviation/ Acronym	Description
VRF	Virtual Routing and Forwarding.
VXLAN	Virtual Extensible LAN
WFA	Working from Anywhere.
WFH	Working from Home.
WIPS	Wireless Intrusion Prevention System.
WPA2/3	Wi-Fi Protected Access protocol.

LIST OF TABLES

1. INVITATION FOR PROPOSAL

Proposals are invited for the CSIR Network upgrade, which covers the design of the network, provisioning, implementation, maintenance and support of the network and associated equipment for five (5) Years.

The objective of issuing the Request for Proposal (RFP) is to identify the most qualified bidder to deliver the necessary services though the gathering information regarding the capabilities, pricing, and overall business insights of potential bidders.

This RFP document details and incorporates, as far as possible, the tasks and responsibilities of the potential bidder required by the CSIR. Generally, good administration, maintenance and supplier practices shall be considered as explicitly included throughout the broad activities covered by this RFP.

This RFP does not constitute an offer to do business with the CSIR, but merely serves as an invitation to the bidder(s) to facilitate a requirements-based decision process.

Responses to this Request for Proposal (RFP) (hereinafter referred to as a Bid or a Proposal) are requested from suitably qualified entities (hereinafter referred to as a Respondent or Bidder) for the design of the network, provisioning, implementation, maintenance and support of the network and equipment for five (5) Years. This is for a complete end-to-end network solution using a single OEM technology. This implies that prospective bidders must have experience in similar scope and sized networks and customer operations.

The CSIR will host a compulsory briefing session to create a dialogue to equip the bidders with all the relevant information to enable them to submit complete Bid documents. Also, the CSIR will allow additional time for potential bidders to ask clarification questions, and a consolidated briefing pack will be circulated to all bidders who attend the compulsory briefing session. Furthermore, the briefing information pack will include details about the High-level design, support teams, and 3rd parties within the CSIR networking ecosystem.

2. PROPOSAL REQUIREMENTS

All proposals are to be submitted in a format specified in this enquiry. However, bidders can submit additional proposals over and above the originally specified requirements.

2.1. Technical Proposal

The following must be submitted as part of the **technical** proposal:

a) Ensure to present a company profile with supporting information, encompassing customer references and a description of projects with a similar scope that have been successfully executed. All instances of company experience and historical documentation should be associated with the bidder's name. However, if there have been changes in company name, ownership, or both, the corresponding supporting evidence must be included. As an integral part of the Company profile submission, please complete and provide Annexure M: Company experience and Customer references. Additionally, please furnish written testimonials or reference letters from reachable current or recent customers who have received OEM equipment, support, maintenance, and installation services.

b) Provide a completed **Annexure A2 – Technical Specifications Response**, including supporting information.

c) Respond to **Annexure C - Technical Evaluation Matrix**

d) Project plan ensuring minimal service interruptions.

e) Provide a valid OEM accreditation certificate or letter. However, if the bidder is an OEM, this requirement does not apply.

f) Provide a signed letter of intent to obtain a financial guarantee during the contracting stage.

g) Provide a letter of intent and sample reports as per Clause 7.2 Support and Maintenance SLA Requirements.

h) Any other supplementary information pertaining to the bid, clearly marked to confirm which section of the bid the supplementary information relates to.

i) Provide Company related documents:

- CIPC company registration document,
- Most recent SARS Tax Compliance Status (South African Companies),
- In the case of Joint Ventures, the bidder must submit a copy of the signed Joint Venture Agreement.
- In the case of subcontracting arrangements, the bidder must submit a copy of the signed subcontracting agreement.

j) Security clearance may be required to work in designated areas. Therefore, the CSIR may require the successful bidder's staff to subject themselves to security clearance by ARMSCOR (Armaments Corporation of South Africa) and SSA (State Security Agency).

2.2. Financial Proposal

The following must be submitted as part of the **financial** proposal:

a) Completed Pricing Schedule (Annexure D).
b) CSD registration report (RSA suppliers only).
c) Standard Bidding Document (SBD) 1 Form (Annexure I).
d) Standard Bidding Document (SBD) 4 Form (Annexure J).

2.3. Mandatory Criteria

Bidder must provide the following mandatory documents, of which failure will lead to disqualification.

(Note: All mandatory documents must be valid at this tender's closing date and time.)

a) Completed and signed **Annexure L – Mutual Non-Disclosure Agreement** submitted before the compulsory briefing session.
b) Completed **Annexure A2 – Technical Specifications Response**
c) Completed **Annexure D – Pricing Schedule**

3. SCOPE OF WORK

This RFP is for the design, provision of network equipment, implementation, maintenance, and support for five (5) years to the CSIR. Technology requirements are described in **Annexure A2 – Technical Specifications Response** and service requirements in sections **7.1 (Project Implementation) and 7.2 (Support and Maintenance SLA Requirements)**. In addition to the introduction and background to the project, the ecosystems and respective technologies mentioned, we aim to simplify, support, modernise features, and reduce costs across the life cycle of our network.

Also, the solution must comply with all governing laws and acts related to, but not limited to, POPIA, PAIA, and the Electronic Communications and Transactions Act.

4. CRITERIA FOR PARTICIPATION IN THE COMPULSORY BRIEFING SESSION

The Bidder must meet the following mandatory criteria for participation in the compulsory briefing session:

a) Submit a fully completed and signed **Annexure L - Mutual NDA (Non-Disclosure Agreement).**

b) It is highly recommended that the team (e.g., Bid Manager and Solutions Architect) who will compile the bid attend the compulsory briefing session, as the bid is technical.

5. INTRODUCTION

The Council for Scientific and Industrial Research (CSIR) is one of Africa's leading scientific research and technology development organisations. In partnership with national and international research and technology institutions, the CSIR undertakes directed and multidisciplinary research and technology innovation that contributes to the improvement of the quality of life of South Africans. The CSIR's main site is in Pretoria, while it is represented in other provinces of South Africa through regional offices.

5.1. About the CSIR and its offices

Although the Pretoria office hosts the largest population of networking hardware (+/- 80%), we also have offices in Stellenbosch, Rosebank (Cape Town), Durban, Johannesburg (Carlow Road and Cottesloe), and finally, two small satellite offices (Paardefontein and Kloppersbos), connected via radio links, with only a small contingent of access layer switches. From time to time, network expansion is required to add connectivity temporarily or permanently.

5.2. CSIR value chain activities and Networking requirements

Research Impact areas direct the type of networking configuration required, and the internal ICT portfolio must be able to provision scalable and agile networking infrastructure within either a laboratory or designated location or across multiple offices, isolating traffic associated with specific research activities. Research activities include using Fourth Industrial Revolution Technologies 4IR-T, like Artificial Intelligence (AI), Big Data, Internet of things (IoT), Cloud, 3D-printing, Robotics, Nanotechnology, and Blockchain. We are looking for a prospective bidder to assist with the design, supply, configuration, implementation, maintenance, and support of our networking infrastructure.

5.3. Networking Architecture

Our network follows a three-tier networking architecture enabled and constrained by the cabling and fibre reticulation designed and implemented for the three-tier network. Our core (first tier) is distributed across a primary and secondary site, and the distribution layer (second tier) serves as aggregation and load balancing nodes across the main Pretoria Campus and remote sites. The access layer (third tier) enables the endpoint connectivity of peripherals, user interfaces, wireless access points, and voice-over-IP to the network.

Our internet breakout redundantly connects all our offices through the SANReN (South African National Research Network) backbone, with breakouts to SEACOM® and the West Africa Cable System (WACS).

5.4. Ecosystem technologies

Technologies across the ecosystem include Check Point and AVAYA/Extreme Networks on our perimeter, AVAYA/Extreme Networks across all three tiers of our physical network, Aruba and HP technologies to support our wireless services and Alcatel for our telephony services. In our data centres, we also have a few DELL brocade switches. However, the CSIR does not only provide networking services to the CSIR, but we also assist tenants with LAN connectivity, facilitating internet breakouts to other internet providers. Our authentication is enabled through LDAP as protocol, with Hybrid Micro Focus Identity Management and Microsoft Active Directory.

5.5. Support model

Our current Network maintenance and support partner, a telephony service provider and physical cabling infrastructure provider, supports our internal, limited dedicated Networking staff. The Team Leader and Contract manager manages these services and Providers within the ICT team. This Bid will phase in and replace the services of the Networking maintenance and support partner by adding implementation and configuration responsibilities.

6. BACKGROUND

A scalable and robust network is a key requirement for ensuring a sustainable ICT ecosystem and service portfolio. Therefore, the CSIR requires the services of a prospective bidder to replace the end-of-life, end-of-support, and end-of-sale CSIR network equipment, as well as support and maintenance of the new network infrastructure during and after implementation. Also, the CSIR will be phasing the replacement over three years, namely 2023/2024-2025/2026. During the first year (phase 1), the HLD (High-Level Design) will be completed,

informing the remainder of the upgrade activities. Therefore, the procurement and implementation of the Core layer and Data Centre networking equipment will be completed in the first year (phase 1), followed by the second phase in year two, and then phase 3 in year three (refer to Table 1: Project phasing~~Table 1: Project phasing~~).

7. SERVICE REQUIREMENTS

The existing network infrastructure cannot meet the current demands and future scaling needs of CSIR. The technological limitations, especially in areas like Software-Defined Networking and Security, contribute to these delays in service delivery.

Through collaboration efforts, as part of the CSIR Strategy formulation of the ICT and Network Strategies, interested Stakeholders provided the following high-level requirements as critical Networking capabilities to pursue as part of this tender:

- **Network Access control:** Improving network security by allowing only authorised devices on the network, blocking those not compliant with security policies.
- **Multi-tenancy** support is required to containerise networks of different tenants, separate from the CSIR, to isolate possible security breaches and network activity, which may negatively impact the CSIR's reputation. The multi-tenant requirement is increasing as Data Centre Hosting requirements and new tenants on campus grow. Although the CSIR will not necessarily provide data services to tenants, voice services are predominantly provided to all tenants, necessitating the requirement to cater for multiple tenants.
- **Support and Administration** Simplicity: The current capabilities do not support the agility to configure Software-Defined Configuration models to orchestrate network provisioning centrally. The time taken to create configurations via an SDN platform will be reduced significantly.
- Support for **Internet of Things:** The proliferation of IoT devices on campus and research necessitates the required network capabilities to support such, which is impossible with the current network hardware.
- Support for **Big data:** There has been an increasing need for the network to carry volumes of packets generated by IoT devices and simulations conducted in labs. The latter may not necessarily be in one geographical area and may span regional offices. Hence, the virtual lab configuration is required to support the transacting of large quantities of data. A second large data requirement is large datasets, which must be sent across CSIR offices and internal to the Data Centre and LAN networks.

- **Wireless** connectivity: The CSIR currently has 425 HP wireless devices and 227 Aruba devices deployed. We are looking for a management capability for all wireless devices and a new Wireless technology that can co-exist with the current models while migrating.
- **Artificial Intelligence (AI):** Recent networking technologies deploy machine and deep learning capabilities to identify patterns in traffic patterns, with the intent to contain possible security-related events and to deploy intelligent routing and self-healing capabilities.

The high-level capabilities led to the requirements specified in sections 7.1 to 7.4.

7.1. Project implementation phasing

The envisaged project phases are informed by the availability of budget, risks, and the unfolding of the re-configuration of the CSIR footprint over the next three years. Therefore, deploying the access layer and wireless will be deferred to the last phase.

Table 1: Project phasing~~Table 1: Project phasing~~ must be studied with the population and distribution of the networking hardware, as articulated in Table 2: Networking hardware population~~Table 2: Networking hardware population~~, which will also be used to inform pricing as part of **Annexure D: Pricing Schedule.**

Table 1: Project phasing

Phases and deliverables	Year	Training	Design	Hardware	Licensing	Implementation (all associated costs)	Year 1 to 5 Maintenance and support of hardware and software
Phase 1							
Complete high-level design and develop the initial low-level design, depicting the configuration of all infrastructure hardware and software.	2023/2024 Q4						
Core and Data Centre. (Preliminary) Pretoria	2023/2024						
Training (Basic), covering design, configuration, implementation, support, and troubleshooting (based on 5 Network Engineers). (Preliminary)	2023/2024 Q4						
Phase 2							
Pretoria site Distribution switches (Aggregation layer) and core switches at all regional sites. (Preliminary)	2024/2025 Q1-Q4						
Training (Intermediate), covering design, configuration, implementation, support, and troubleshooting (based on 5 Network Engineers). (Preliminary)	2024/2025 Q1-Q4						
Phase 3							
Access layer, or Wireless, or both. (Preliminary) All sites	2025/2026 Q1-Q4						
Training (Advanced), covering design, configuration, implementation, support, and troubleshooting (based on 5 Network Engineers). (Preliminary)	2025/2026 Q1-Q4						

Table 2 below indicates the network hardware population and distribution across the CSIR offices.

Table 2: Networking hardware population.

Core and Data Centre switches					
Network infrastructure models	**QTY**	**Model numbers**	**To be replaced in Phase 1,2 or 3**	**Multimode or single-mode**	**Location**
Core switch (DC)	1	VSP 8284XSQ	Phase 1	Single-mode	Pretoria
Core switch (DR)	1	VSP 8284XSQ	Phase 1	Single-mode	Pretoria
Internet switch (DC)	1	VSP 7254XSQ	Phase 1	Multimode	Pretoria
Internet switch (DR)	1	VSP 7254XSQ	Phase 1	Single-mode	Pretoria
Data Centre	12	ERS 4826GTS-PWR	Phase 1	Multimode	Pretoria
Data Centre	31	VSP 7024XLS	Phase 1	Multimode	Pretoria
Data Centre	2	VSP 7254XSQ	Phase 1	Multimode	Pretoria
Aggregation/Distribution Switch					
Core switch (region)	1	ERS 5530-24TFD	Phase 2	Single-mode	Durban
Core switch (region)	1	ERS 5530-24TFD	Phase 2	Single-mode	Cape Town
Core switch (region)	1	ERS 5632-FD	Phase 2	Single-mode	Stellenbosch
Core switch (region)	1	ERS 4524GT-PWR	Phase 2	Single-mode	Carlow Road
Core switch (region)	1	ERS 4850GTS-PWR	Phase 2	Single-mode	Cottesloe
Building 9	2	VSP 7024XLS	Phase 2	Single and multimode	Pretoria
Building 14	1	ERS 5632FD	Phase 2	Single-mode	Pretoria
Building 16	2	VSP 7024XLS	Phase 2	Single-mode	Pretoria
Building 20	4	VSP 7024XLS	Phase 2	Single-mode	Pretoria
Building 35	2	VSP 7024XLS	Phase 2	Single-mode	Pretoria
Building 38	2	VSP 7024XLS	Phase 2	Single-mode	Pretoria
Building 43	1	ERS 5632FD	Phase 2	Single-mode	Pretoria
Building 44	2	ERS 5632FD	Phase 2	Single-mode	Pretoria
Entabeni	1	VSP 4450GSP-PWR	Phase 2	multimode	Pretoria

	Access switches and Wireless				
Network infrastructure models	**QTY**	**Model numbers**	**To be replaced in Phase 1,2 or 3**	**Multimode or single-mode**	**Location**
All buildings	47	ERS 3510GT-PWR	Phase 3	Single-mode	Pretoria, Johannesburg, Durban, Cape Town
Building 9	1	ERS 3549GTS-PWR	Phase 3	Single-mode	Pretoria
All buildings	68	ERS 4524GT-PWR	Phase 3	Single-mode	Pretoria, Johannesburg, Durban, Cape Town, Stellenbosch
All buildings	14	ERS 4526GT-PWR	Phase 3	Single-mode	Pretoria
All buildings	182	ERS 4548GT-PWR	Phase 3	Single-mode	Pretoria, Johannesburg, Durban, Cape Town, Stellenbosch
All buildings	46	ERS 4850GTS-PWR	Phase 3	Single-mode	Pretoria, Johannesburg, Durban, Cape Town, Stellenbosch
Entabeni	1	ERS 4926GTS-PWR	Phase 3	Single mode	Pretoria
All buildings	10	ERS 4950GTS-PWR	Phase 3	Single-mode	Pretoria
Building 9	5	MSM760	Phase 3	Single-mode	Pretoria
Building 9	2	Aruba7010	Phase 3	Not Applicable	Pretoria
Building 37	1	MSM430	Phase 3	Not Applicable	Pretoria

	Access switches and Wireless				
Network infrastructure models	**QTY**	**Model numbers**	**To be replaced in Phase 1,2 or 3**	**Multimode or single-mode**	**Location**
Building 2 - 46	425	MSM460	Phase 3	Not Applicable	Pretoria, Johannesburg, Durban, Cape Town, Stellenbosch
Building 50, Stellenbosch, ICC	3	MSM466-R	Phase 3	Not Applicable	Pretoria, Stellenbosch
Building 2 - 46	25	HP560	Phase 3	Not Applicable	Pretoria, Johannesburg, Durban, Cape Town, Stellenbosch
Building 1	1	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Building 9	21	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Building 3	20	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Building 39	28	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Building 43	41	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Building 44	66	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Entabeni	20	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Carlow Road	14	Aruba IAP-325	Phase 3	Not Applicable	Johannesburg
Paardefontein	3	Aruba IAP-325	Phase 3	Not Applicable	Pretoria
Kloppersbos	6	Aruba IAP-325	Phase 3	Not Applicable	Pretoria

7.2. Support and Maintenance SLA Requirements

Table 3: SLA performance and reporting requirements~~Table 3: SLA performance and reporting requirements~~ indicate the SLA requirements of the CSIR, to which the Bidder must commit. It is required of the Bidder to confirm, by signature, that the requirements can be met.

In addition, the Bidder must submit sample reports, which will be evaluated against the reporting requirements.

The Bidder must supply an on-site support resource during deployment. The Bidder must have local support in South Africa.

Please note that all sample reports must contain dummy data, and points will be allocated in total for sections: Core, Distro, Access, Wireless, NAC and Data Centre.

Table 3: SLA performance and reporting requirements

Section	SLA requirements (resolution)	Sample reports to be submitted	Points allocation
1. Core	SLA performance requirements: • 30 Minutes Response Time for Priority 1 calls with a critical and widespread failure. • 24 hours a day x 7 days a week x 365 days a year – Call centre availability for call logging. • 2-4hr resolution time, inclusive of response and replace • Detailed report on Support credits/tokens/hours used. The initial contract for support will be five years with the successful Bidder. However, the Bidder is expected to provide a letter of intent to support the deployed models for not less than 60 months. If, during the contracting phase, the bidder cannot guarantee support of the models for no	Bidder must provide one (1) sample of a comprehensive Monthly SLA report with an analysis of the data that covers the following areas: 1. Number of calls logged per month. 2. Mean Time to Resolve (MTTR) 3. Resolution details for all incidents. 4. Problem Management root analysis cause report, as guided per ITIL. 5. Summary of maintenance and support actions undertaken per month 6. Detailed report on Support credits/tokens/hours used	Points will be allocated in the following manner: • Example report submitted without analysis covering less than three (3) areas. **= 0 Points** • Example report submitted with analysis, and between at least three (3) and five (5) areas. **= 5 Points** • Example report submitted with analysis

Section	SLA requirements (resolution)	Sample reports to be submitted	Points allocation
	less than 60 months, the CSIR reserves the right to select an alternative bidder.		and all six (6) areas. **= 10 Points**
2. Distro	SLA performance requirements: • 30 Minutes Response Time for all Priority 1 calls with a critical and widespread failure. • 24 hours a day x 7 days a week x 365 days a year – Call centre availability for call logging • 2-4hr resolution time, inclusive of response and replace • Detailed report on Support credits/tokens/hours The initial contract for support will be five years with the successful Bidder. However, the Bidder must provide a letter of intent to support the deployed models for not less than 60 months—30 Minutes Response Time for Priority 1 calls with a critical and widespread failure.		
3. Access	Next business day (NBD) • 24 hours a day x 7 days a week x 365 days a year – Call centre availability for call logging & 2hr to respond. • NBD to replace equipment.		

Section	SLA requirements (resolution)	Sample reports to be submitted	Points allocation
	Detailed report on Support credits/tokens/hours The initial contract for support will be five years with the successful Bidder. However, the Bidder must provide a letter of intent to support the deployed models for not less than 60 months—30 Minutes Response Time for Priority 1 calls with a critical and widespread failure.		
4. Wireless	Next business day 1. 30 30-minute response Time for Priority 1 call with a critical and widespread failure. 2. 24 hours a day x 7 days a week x 365 days a year – Call centre availability for call logging & 2hr to respond 3. NBD to replace equipment 4. Detailed report on Support credits/tokens/hours The initial contract for support will be five years with the successful Bidder. However, the Bidder is expected to provide a letter of intent to support the deployed models for not less than 60 months. 30 Minutes Response Time for Priority 1 calls with a critical and widespread failure.		

Section	SLA requirements (resolution)	Sample reports to be submitted	Points allocation
5. Data centre	SLA performance requirements: • 30 Minutes Response Time for Priority 1 calls with a critical and widespread failure. • 24 hours a day x 7 days a week x 365 days a year – Call centre availability for call logging & 2hr to respond • 2-4hr resolution time, inclusive of response and replace • Detailed report on Support credits/tokens/hours used. The initial contract for support will be five years with the successful Bidder. However, the Bidder is expected to provide a letter of intent to support the deployed models for not less than 60 months.		
6. NAC	SLA performance requirements: • 30 Minutes Response Time for Priority 1 calls with a critical and widespread failure. • 24 hours a day x 7 days a week x 365 days a year – Call centre availability for call logging & 2hr to respond • 2hr to replace.		

Section	SLA requirements (resolution)	Sample reports to be submitted	Points allocation
	• 2-4hr resolution time, inclusive of response and replace • Detailed report on Support credits/tokens/hours used. Detailed report on Support credits/tokens/hours. The initial contract for support will be five years with the successful Bidder. However, the Bidder must provide a letter of intent to support the deployed models for not less than 60 months—30 Minutes Response Time for Priority 1 calls with a critical and widespread failure.		
			Max score: 60 Minimum score: 30 Score allocated:

Support credits/tokens/hours for ad-hoc services.

The bidder must provide a five (5) year support and maintenance service to ensure availability, security, and operability of the equipment, configuration, and services. The scope covers all equipment deployed as part of this project.

In addition, the Bidder must also provide support credits to the CSIR, which will be used on an ad-hoc basis in the event of small projects, advisory, or design services that will add or change potential network services. These credits must be supplied in bundles of:

- 1 – 250 hours
- 251 – 500 hours
- 501 – 1000 hours
- >1000 hours

The CSIR does not guarantee or commit to purchasing any support credits, and the Bidder shall not limit the number of support hours that the CSIR may procure in any way.

Use of the support credits will be at the sole discretion of the CSIR. Support includes software assurance (the supply, installation and commissioning of the latest software and firmware versions where possible).

Hours purchased must be available to the CSIR for the full network scope of services (DC, LAN, WIFI, NAC, etc.) as and when required and may be used at any time throughout the 5-year duration, without any periodic restrictions other than the 5-year duration.

Unused hours must never expire and must roll over to a new contract or be credited back to CSIR.

7.3. Company experience

Bidder(s) must complete the information requested in Table 2 and Table 3 of **Annexure M: Company experience and Customer references**, using the definitions in Table 4: Proficiency level definition and scoring~~Table 4: Proficiency level definition and scoring~~ below**.**

• Proficiency Level in providing Enterprise Network Class Services

Table 4: Proficiency level definition and scoring

Proficiency Level in providing Enterprise Network Class Services		
As per the original equipment manufacturer of the proposed solution for this tender, the bidder has little or no experience in the specific technology area. The bidder may be able to provide basic services but is not likely to have the expertise or experience to meet the more demanding requirements of the tender.	Novice	0
As per the original equipment manufacturer of the proposed solution for this tender, the bidder has some experience with the specific technology area. The bidder can provide more complex services than a novice level but may not have the full range of expertise or experience and will likely not have the resources to meet the most demanding requirements of the tender.	Intermediate	3
As per the original equipment manufacturer of the proposed solution for this tender, the bidder has extensive experience with the specific technology area. The bidder can provide a wide range of skills, services, and solutions in this area and is likely to have the expertise and experience but with only a limited number of resources to meet the most demanding requirements of the tender.	Advanced	7
As per the original equipment manufacturer of the proposed solution for this tender, the bidder is a leading authority in the specific technology area. The bidder can provide innovative and cutting-edge solutions and will likely have the resources and capabilities to meet even the most challenging tender requirements.	Expert	10

- Years of experience providing Enterprise Network Class Services and Support

In Table 2 of **Annexure M: Company experience and Customer references**, the bidder will provide the “Proficiency Level” per technology area per the definitions outlined in Table 4: Proficiency level definition and scoring~~Table 4: Proficiency level definition and scoring~~.

a. The bidder will include the original equipment manufacturer's accreditation or similar information with the bid for validation.

7.4. Customer References

In Table 5, please provide, as a reference, the details per current or past customers or both to whom you provided similar/relevant services in a similar/relevant environment.

- For Table 5, please indicate the technology area per customer.
- Please provide an example(s) of the most complex challenge(s) you have successfully resolved while supporting a client(s).
- Please include a company profile/overview incorporating additional information to illustrate your company's experience.

Table 5: Customer references

Self-assessment of the Bidder's networking scope delivered at contactable customers	Company name	Customer email contact details	Customer telephone number contact details	Scope Mark with an X the networking area scope delivered		
				Networking (Core, Access, Distribution and Data Centre)	Wireless Technology	Network Access Control (NAC)
Customer 1						
Customer 2						
Customer 3						
Customer 4						
Customer 5						
Customer 6						
Customer 7						
Customer 8						
Customer 9						
Customer 10						