AIRPORTS COMPANY
SOUTH AFRICA

Annexure A - Scope of Work

For

IT Facilities Power; Cooling; Fire suppression & Cabling Infrastructure (IT Physical) Services

Bid Number COR8085/2025/RFP

Description:

Request for Proposal for the Supply, Installation, Commissioning, Support and Maintenance of IT Facilities Power; Cooling; Fire suppression & Cabling Infrastructure (IT Physical) Services for a Period of 60 months to Airports Company South Africa

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Confidential

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1.0 SCOPE OF WORK OVERVIEW AND OBJECTIVES

1.1 Background

ACSA requires a qualified, experienced and skilled service provider to Supply, Install, Support, maintain and monitor its existing and new IT Facilities, Power, Cooling, Fire suppression & Cabling Infrastructure (IT Physical) Services infrastructure at all airports and the corporate office.

1.2 High-Level Scope of Work Required

1.2.1 **IT Facilities:** The Provider may, from time to time and as requested by ACSA in writing, Supply, Install, maintain, Support and monitor the IT facilities infrastructure for the Power, Cooling, Fire Suppression and Infrastructure Service Towers. This includes but is not limited to data centres, core rooms, passive distribution rooms, wiring closets, cabinets, Environmental racks, outdoor cabinets, flooring, ceiling tiles, etc.

1.2.2 **Safety Systems:** The Provider may, from time to time and as requested by ACSA in writing, supply, install, maintain and support safety systems in IT Facilities. This includes but is not limited to fire stopping, fire detection, fire retarding materials, fire retarding paint, fire-rated doors and fire suppression systems.

1.2.3 **Environmental Monitoring**: The Provider may, from time to time and as requested by ACSA in writing, supply, install, maintain, Support and monitor the environmental monitoring systems. This includes but is not limited to APC NetBotz rack and wall environmental monitoring systems, and all associated door, smoke, temperature, humidity, and other associated sensors and relays

1.2.4 **Access Control:** The Provider may, from time to time and as requested by ACSA in writing, supply, install, maintain and support the access control systems at critical infrastructure environments. This includes only visitor registers, emergency break glass, maglocks, swing arms and doors.

1.2.5 **LAN Cabling System –** this refers to the LAN cabling components required to connect to all the LAN-attached devices and interconnect the LAN equipment, which includes the following:

1.2.5.1 Cabling – to include UTP and fibre cabling

1.2.5.2 Cabling termination blocks, connectors and patch panels

1.2.5.3 Cabinets

1.2.5.4 Cabinet brush panels

1.2.5.5 Cabinet blanking panels

1.2.5.6 Cabinet extractor fans

1.2.5.7 Cabling fly and patch leads

1.2.5.8 Mounting of wireless access points and display monitors

1.2.5.9 Passive optical networks.

1.2.5.10 Storage Area Network (SAN) Cabling Infrastructure

1.2.5.11 Multi-mode and Single-mode fibre cabling. This comprises only in-rack LC-LC type fibre connectivity.

1.2.6 **Cabling Infrastructure Services** - The Provider may, from time to time and as requested by ACSA in writing, Supply, install, maintain and support the copper, coaxial and fibre data cabling. Cabling Infrastructure Services include the provisioning, engineering, operations and administration of cabling infrastructure.

1.2.7 **Cable Routes –** The Provider may, from time to time and as requested by ACSA in writing shall document and map all cabling routes. This includes, but is not limited to, within ceiling voids, risers, underground ducts, etc. The Provider shall continuously update the infrastructure routing database. This includes routing in cable trays, sleeves, trenching, manholes, etc.

1.3 Service Objectives

The following are the key high-level Service objectives ACSA expects to achieve through this RFP

1.3.1 **Robust Infrastructure -** Deliver a uniform, reliable, scalable, and resilient electrical, cooling, fire suppression and cabling infrastructure adhering to industry best practices and validated designs, ensuring consistent performance and adaptability to future needs.

1.3.2 **Guaranteed Service Quality - Provide** services with defined quality standards, backed by Service-Level Requirements (SLRs) and supported by OEMs, ensuring accountability and reliability.

1.3.3 **Streamlined Management -** Minimise administrative effort by engaging the Provider to provide the management function to achieve the SLAs specified in this scope of work

1.3.4 **SLR Adherence -** Achieve the Service Level Requirements outlined in the Statement of Work (SOW), ensuring all performance metrics and operational standards are consistently met.

1.3.5 **Business Agility -** Support ACSA's business initiatives as they arise, providing flexible and responsive services to align with strategic and operational objectives.

1.3.6 **Scalable Service Delivery -** Enable ACSA to expand its service delivery and support capabilities to its business units, subsidiaries, and stakeholders, fostering growth and collaboration.

1.3.7 **Cost Efficiency -** Continuously lower service delivery and ownership costs by reusing or transitioning existing infrastructure and optimising current licensing agreements, maximising value and efficiency.

1.3.8 **Break/Fix Oversight -** Coordinate and monitor Break/Fix repairs, including those executed by third-party suppliers, to ensure timely resolution and minimal disruption to operations.

1.3.9 **IMACD Execution -** Perform approved Install, Move, Add, Change, Dispose and Delete (IMACD) services for hardware and software, ensuring smooth lifecycle management of IT assets.

1.3.10 **Asset Tracking -** Maintain accurate inventory records of in-scope software and hardware as required by ACSA, supporting compliance and efficient resource management.

1.3.11 **Employee Onboarding -** Provide technical orientation and training for new ACSA employees on existing systems and software, ensuring quick integration and productivity.

1.3.12 **End-to-End Service** - Include installation, deployment, ongoing support, and Break/Fix services for all in-scope service tiers, delivering a comprehensive and reliable service experience.

2.0 SERVICE ENVIRONMENT

2.1 Scope of the Infrastructure to be Supported

2.1.1 The following subsections and related appendices further describe and scope the hardware and software requirements to be supplied as and when requested by ACSA in writing, and/or supported and maintained and/or with which the Provider shall comply.

2.1.2 A high-level listing and description of hardware and software to be supported is provided.

Category	Service	Description
Hardware	UPS installation, maintenance, upgrade, and repairs	100KVA Rittal
	HVAC	Dunham Bush, Hiref split units
		Daikin, York, LG and Rittal split units
		Uniflair downblower
		Airdale downblower
		APC in row cooler
		BlueBox in row cooler
		Eaton in row cooler
	Cabling - UTP	Cat7
		Cat6A
		24 port 1U Cat6A modular patch panel
	Cabling - Fibre	Single mode SO2
		Single mode SO3
		Multimode OM3
		Multimode OM4
		24 port LC Duplex fibre patch panel
	Rack	Modrack 43u
		Rittal 43u
		Rittal envirorack
		IP55 Outdoor enclosures
	Monitoring	APC Netbotz
	Cable trays	Data cable trays
		Wiremesh data cable trays
		Bosal pipes
	Fire Suppression	VESDA LASER FOCUS 250 Fire Detection
		NOVEC 1230 Fire Suppression
		Inergen Gas Suppression
		CO2 5kg Gas Suppression
Software	APC Structureware	Data Centre Expert
		Data Centre Operations

Table 1 - High Level List of existing Infrastructure and Software

2.2 Service locations

2.2.1 A description and location of all ACSA facilities and office locations requiring in-scope network services.

Cluster	Airports in the regions	Site Code
Cluster 1	• OR Tambo International Airport	JNB
	• Aviation Park	AVP
	• Bram Fischer International Airport	BFN
Cluster 2	• Cape Town International Airport	CPT
	• George Airport	GRJ
	• Kimberley Airport	KIM
	• Upington International Airport	UTN
Cluster 3	• King Shaka International Airport	DUR
	• King Phalo Airport	ELS
	• Chief Dawid Stuurman International Airport	PLZ

Table 2 - Regional Distribution of ACSA locations

SITE CODE	ADDRESS
JNB	O.R. Tambo International Airport, Airport Rd, Johannesburg, 1627
AVP	Aviation Park, Western Precinct, OR Tambo International Airport, Kempton Park, 1632
CPT	Cape Town International Airport, Matroosfontein, Cape Town, 7490
DUR	King Shaka International Airport, La Mercy, 4407
PLZ	Chief Dawid Stuurman International Airport, Allister Miller Drive, Walmer, 6070
GRJ	George Airport, Old Mosselbay Road, George, 6529
ELS	King Phalo Airport, Settlers Way, East London, 5200
KIM	Kimberly Airport, Compound Patterson Road, Kimberly, 8300
BFN	Bram Fischer International Airport, Bloemfontein, 9300
UTN	Upington International Airport, Diedericks Street, Upington, 8801

Table 3 - Detailed site schedule

2.2.2 This Site Schedule will be revised by agreement between the ACSA and the provider account manager/Service Manager from time-to-time to meet the ACSA's requirements at additional locations.

3.0 PRICING NOTES

The following notes should be considered when pricing services for this tender.

3.1 USD-influenced items can be adjusted with the Rate of exchange during the contract term, according to the process and terms in Section 4.0 RATE OF EXCHANGE, QUOTATIONS AND INVOICES.

3.2 Bidder quotations can be added as additional information, but the pricing file must be filled in in the format provided.

3.3 Only fill in columns in green in the pricing file.

3.4 **NOTE that ACSA reserves the right to reduce the scope depending on business needs. There is no guarantee that the full bill of materials will be executed.**

4.0 RATE OF EXCHANGE, QUOTATIONS AND INVOICES

The following terms will be used to deal with the Rate of exchange during the term of the awarded contract for items affected by the rate of exchange as per the pricing files. It also details the requirements for quotations

4.1 Rate of exchange for the offer validity period

4.1.1 Pricing must be valid for 120 days from the RFP closing date.

4.1.2 The exchange rate is provided in the pricing file.

4.2 Quotations and Rate of Exchange during the execution phase

4.2.1 All initial Quotations for engagements will use a Fixed Rate of exchange. This rate will be communicated by ACSA to the provider on a 3-monthly basis. This rate will not be used for placing an order.

4.2.2 Once scoping for an engagement is completed and funds are secured. The provider will provide a final quote for the scope. This quotation must be fixed for a period of 14 days.

4.2.3 The final Quotation will be reviewed by the ACSA internal treasury department to approve the quoted rate of exchange.

4.2.4 ACSA will proceed with the order issuing process after treasury approval.

4.2.5 Should a Purchase order not be provided during the quote validity period (as per 4.2.2). The provider must supply ACSA with a Variance order quote once the Purchase order is received.

4.2.6 This Quote must clearly show the original Rate of Exchange and the actual rate of exchange (the spot rate for the day that the order is placed with the provider's supplier).

4.2.7 ACSA will proceed with obtaining approval of the Variance order quotation RoE.

4.2.8 Once approved, a Variance order will be processed.

4.2.9 Pricing is based on a fixed markup % per item type. ACSA may, at its own discretion, ask for the supplier's quote to be provided for every engagement. This will be used to verify the landed cost and to audit if the % mark-up as quoted for the type of device is upheld as per the pricing schedule.

4.2.10 If products were previously procured by the provider for stock, then the original invoice for that stock should be provided as proof against the quotation.

4.2.11 All quotations to be provided in PDF and Excel format (editable). And must have all relevant fields as per the Pricing schedule.

4.3 Invoices

4.3.1 All invoices are to be accompanied by

I. Copy of Purchase Order
II. Proof of delivery, signed by both the provider and an ACSA representative, that also includes the relevant serial numbers
III. Asset list in Excel format according to the template provided by ACSA.

IV. Proof of automated asset tracing activation.
V. Invoice to have the ACSA purchase order number coded on it

4.3.2 All invoices not in dispute will be paid according to payment terms.

5.0 ASSET MANAGEMENT, TRACKING and LOSSES

Due to the nature of the equipment related to the services covered by this RFP, the following should be noted for special attention

5.1 Asset management

5.1.1 ALL devices (new and returned) remain in the control of the provider until handed over to an ACSA user/representative. This handover needs to be recorded officially with a signed handover form signed by a duly authorised **ACSA employee**. The record must be attached to the ASSET record for future reference.

5.1.2 For approved disposals, the provider must wipe the device; certified proof must be provided and included in the service cost.

5.1.3 The history of every device must be kept in the asset register or system provided for at least 10 years.

5.1.4 An ACSA resource or representative and a provider representative must sign for all deliveries. Planning should consider this when deliveries to the onsite are arranged, as this will affect the Service levels.

5.1.5 On-site stock should be kept to the required levels to ensure service delivery according to SLRs.

5.1.6 The Service Provider must issue their on-site resources with asset scanners to reduce manual data capture and increase data quality.

5.1.7 Scanners provided should be wireless-capable.

5.1.8 Asset scanners must form part of the monthly fixed maintenance cost.

5.1.9 The monthly storeroom stock count is to be completed, with updated stock sheets to be submitted to ACSA and reported on in the monthly SLA meeting. Movements in the month to be accounted for in the summary schedule (listing device info, detail of asset move (i.e. end user it was moved to / new store or location it was moved to) and service request number supporting the move)

5.2 Asset Tags and tracking

5.2.1 ACSA will provide financial asset tags to the provider for affixing to the devices. Devices must be asset-tagged before being installed.

5.3 Asset movement

5.3.1 Any asset that must be transferred to another ACSA site by the provider for whatever reason must follow the ACSA asset transfer process before the movement.

5.3.2 NO device covered under the **onsite repair SLA** can be removed from an ACSA site. The device must be repaired onsite as per the SLA.

5.4 Losses

5.4.1 Any loss needs to be formally reported to ACSA within 2 days of the loss being detected.

5.4.2 Any device, whether new, decommissioned, operational or damaged, that is lost, for whatever reason, that is in the control of the Service Provider must be replaced at the Service Provider's cost.

5.4.3 The process of replacement must be actioned within 5 days after the loss is detected by either party.

5.4.4 Any loss where the Service Provider does not have enough proof that the device was NOT in their control (Issue forms, transfer forms) will be deemed in their control.

5.4.5 The following table lists the value and terms of the replacements:

Device Age	Replacement Terms
<=12 months	Replacement of the device with a new device at the current prevailing ACSA standard
12 to < 18 months	Monetary Replacement of 90% of the original device's cost
18 to < 24 months	Monetary Replacement of 70% of the original device's cost
24 to < 30 months	Monetary Replacement of 60% of the original device's cost
30 to < 36 months	Monetary Replacement of 50% of the original device's cost
36 to < 42 months	Monetary Replacement of 30% of the original device's cost
42 to < 54 months	Monetary Replacement of 15% of the original device's cost
54+ months	Monetary Replacement of 10% of the original device's cost

Table 4 – Loss replacement terms and values

5.4.5.1 Monetary values must be credited to ACSA's account and will be used to procure new devices.

5.4.5.2 Monetary values cannot be allocated to outstanding monies for other invoices.

5.5 Replacement due to damage/malfunctions (in warranty)

5.5.1 The Service Provider must endeavour to fix a device rather than to replace it.

5.5.2 If a device needs to be replaced during its life due to damage or malfunction, the service provider must inform the ACSA representative and follow the provided asset disposal process for damaged/malfunctioning devices.

5.6 Equipment Ownership Transfer

5.6.1 Any equipment procured under the agreement only transfers ownership when delivered to an ACSA site, with the approved ACSA resource signature confirming receipt.

5.6.2 The provider must ensure off-site storage is available for the bulk of the equipment until site preparation is concluded.

5.6.3 All warranties and licenses of equipment only “start” when the equipment transfers ownership and must be activated with the OEM.

5.6.4 Although equipment ownership transfers, it is still the responsibility and accountability of the provider to manage the on-site equipment. Until such time, a transfer form is obtained from an ACSA resource or representative, and the equipment is in the provider's control.

5.6.5 Any losses before obtaining the issue forms are for the provider's account.

5.7 Equipment Storage

5.7.1 All equipment is to be warehoused by the provider at no cost to ACSA until it is delivered.

5.7.2 Equipment delivered to the site will be installed in its final location, where possible.

6.0 PERSONNEL

6.1 **Qualified Staffing -** The provider must supply professionally trained and appropriately certified personnel to fulfil the roles, responsibilities, and Service Level Requirements outlined in this service specification, ensuring high-quality service delivery.

6.2 **Certification Compliance -** The provider must maintain compliance with all ACSA-IT certification requirements throughout the contract term. Additional certifications, as communicated by ACSA, must be obtained within four months of the request. Key certification areas include Certified Datacentre Expert (CDCE), Certified Datacentre Facilities Operations Management (CDFOM), EcoStruxure Datacentre Expert or general data centre management certifications like the Certified Data Centre Management Professional (CDCMP), Registered Communications Distribution Designer (RCDD) and OEM certifications for in-scope products and technologies to maintain warranties. On-site personnel certification requirements, if applicable, are detailed in Table 5 - Minimum Resource Requirements.

6.3 **Onsite Resource Availability -** Suitably certified personnel must be available onsite at designated locations for preventative and corrective maintenance. While normal working hours apply, after-hours availability may be required to accommodate maintenance windows or resolve disruptive incidents, ensuring minimal service disruption.

6.4 **Flexible Resourcing Model -** The provider must adapt its resourcing model to meet the Service Level Requirements (SLRs) outlined in Section 13.5, utilising permanent onsite resources for preventative maintenance and variable offsite resources for corrective maintenance to ensure efficient and compliant service delivery.

6.5 **Restricted Resource Use -** Onsite resources may not be reassigned to projects without prior written approval from the ACSA Network Operations Manager or Infrastructure Manager, ensuring dedicated support for operational needs.

6.6 **Security Vetting -** All resources must undergo security vetting by the state security agency at a secret level. Required forms and documentation must be submitted within the first month of the contract. Any resource failing the vetting process must be replaced immediately to maintain security compliance.

6.7 **NDA Compliance -** All resources must sign the ACSA Non-Disclosure Agreement (NDA) provided in this tender, ensuring confidentiality and protection of sensitive information.

6.8 The table below indicates the minimum expectation for resources, whether on-site or variable. Please increase, as necessary.

Role	Location	High-Level Function	Minimum Resources Required and coverage window
Site Managers	JNB - Onsite CPT – Onsite DUR - Onsite	• Must be available 100% onsite during Standard Operating hours – this may require more than one shift to ensure all operating hours are covered – the provider will define the number of shifts and hours in the shift to cover ACSA Operating hours and SLA requirements • Project and contracts management experience coupled with a minimum of 5 years of IT infrastructure exposure • Manage onsite staff, • Represent Provider in project requests and project meetings • Monitor the environment – receive and respond to alerts • IMACD plans	JNB -1– During operational hours CPT -1- During operational hours DUR -1– During operational hours

Role	Location	High-Level Function	Minimum Resources Required and coverage window
		• Resource and stock planning • Reporting - as defined in the reporting table, and any other ad-hoc reports as requested by ACSA • Expert advice on managing the infrastructure • Co-ordinate new requests, change requests, drawings, documentation, and quality control • Assist with IT commercial initiatives and manage all site installations/projects/maintenance • Ensure that all safety requirements are strictly complied with – this includes updating safety files, acquiring approvals for hot works/airside works, the use of the correct safety equipment for all installations, as well as the use of correct signage. • The site managers will be utilised both within the operations and projects environments. • May be required to travel to the associated regional, smaller airports when required.	
Senior Technicians	all sites	• The senior technician based at JNB will also be responsible for AVP • During Standard Operating Hours, there must be 2 senior Technicians onsite in JNB during standard operating hours • During Standard Operating Hours, there must be 2 senior Technicians onsite in DUR during standard operating hours • During Standard Operating Hours, there must be 3 senior Technicians onsite in CPT during standard operating hours • During Standard Operating Hours, there must be 1 senior Technician onsite at each Regional Airport. • At all times, there must be 1 senior Technician onsite in JNB, DUR and CPT after hours • This may require more than one shift to ensure all operating hours are covered – the provider will define the number of shifts and hours in the shift to cover ACSA Operating hours and SLA requirements • The senior technician will lead the team of cabling technicians – in each team, there will be 2 cabling technicians and the senior technician • The Senior Technician must have OEM accreditation and certified installers with a minimum of 3 years' experience and professional knowledge in data cabling, Fibre Optics Association (FOA) certification, Data-Centre, Core-Centre and Wire-Centre facilities installations and support. • Responsible for cabling installations, all maintenance tasks, including Corrective Maintenance, monitoring the environment, testing, temporary resolutions and advanced 3rd line diagnosis of cabling, safety, security and monitoring systems. • Attend meetings with ACSA and other stakeholders at the airports. • Responsible for drawings, documentation, change requests, quality control and planning prior to the commencement of any works. • To be primarily utilised within the operational environment and may be used within the project environment only upon written approval from the ACSA IT Infrastructure engineer. • The senior technicians must have Airside Vehicle Operators Permits (AVOP) and scissor lift/cherry picker licenses	Standard Operating hours per airport: 2 – JNB 2 – DUR 2 – CPT 1 – each regional airport Afterhours: 1 – JNB 1 – DUR 1 – CPT
Cabling Technicians	All sites	• Technicians based at JNB will also be responsible for AVP • At all times, there must be 12 Technicians on-site in JNB during standard operating hours • At all times, there must be 6 Technicians onsite in DUR during standard operating hours • At all times, there must be 9 Technicians onsite in CPT during standard operating hours	Standard Operating hours per airport: 12 – JNB 6 – DUR 9 – CPT 2 – each regional airport

Role	Location	High-Level Function	Minimum Resources Required and coverage window
		• During standard operating hours, there must be 2 technicians on-site at the Regional Airports • After hours, there must be 2 technicians on-site in JNB, DUR and CPT • At all times, there must be the minimum defined number of cabling technicians onsite - This may require more than one shift to ensure all operating hours are covered – the provider will define the number of shifts and hours in the shift to cover ACSA Operating hours and SLA requirements • Certified copper and/or fibre installers with a minimum of 1 year's experience for conducting preventative and corrective maintenance on CAT5,6,7 data infrastructure • Install, troubleshoot, clean, maintain and repair the cabling infrastructure, mount equipment, update the senior technicians and site manager on work progress and incident resolution. • To be utilised within the operational environment only and will not be utilised during projects. • Where chaperone services are required, the resources may be requested to assist	Afterhours: 2 – JNB 2 – DUR 2 – CPT
Cleaner & Chaperones	JNB - Onsite CPT – Onsite DUR - Onsite	• Cleaner based at JNB to be responsible for AVP • Suitably trained IT facility cleaners who understand the sensitivity of the IT equipment in the facilities that they operate in. • Responsible for the hygiene housekeeping of facilities, including vacuuming, damp mopping, cleaning after construction, etc. • Follow IT industry accepted cleaning procedures, materials and equipment • The cleaning schedule, process and procedure will be part of the Provider's preventive maintenance plan. • Where chaperone services are required, the assigned cleaner/chaperone resource will address the request • Will require airside access permits •	JNB – 2 - During office hours DUR – 2 - During office hours CPT – 2 - During office hours
Administrative clerks	JNB - Onsite CPT – Onsite DUR - Onsite	• Administrative clerk based at JNB will also be responsible for AVP. • Minimum of 3 years' MS Office experience • Strong coordination and communication skills • Update call logging system, managing onsite work orders, invoices, weekly and monthly reports, call log reports, minutes of meetings and stock control. • To be utilised within the projects and operational environments for administrative purposes only, and will also assume the function of assistant to the senior site manager	JNB – 1 - During office hours DUR – 1 - During office hours CPT – 1 - During office hours
Electrical Technician	JNB – Onsite CPT, DUR, Regional Airports – As required to make SLA	• Technicians based at JNB will also be responsible for AVP • At all times, there must be 1 Electrical Technician onsite at JNB during standard operating hours • At all times, there must be the minimum defined number of cabling technicians onsite - This may require more than one shift to ensure all operating hours are covered – the provider will define the number of shifts and hours in the shift to cover ACSA Operating hours and SLA requirements • Certified Electrician with a minimum of 3 years' experience for conducting preventative and corrective maintenance • Installations, troubleshooting, cleaning, maintenance and repairs • To be utilised within the operational environment only and will not be utilised during projects.	1 – JNB – operational hours CPT, DUR, Regional Airports - When required
UPS Engineer	All sites - As required to make SLA	• Certified UPS technician with a minimum of 3 years' experience in conducting preventative and corrective maintenance • Installations, troubleshooting, cleaning, maintenance and repairs	All Airports– When required

Role	Location	High-Level Function	Minimum Resources Required and coverage window
		• To be utilised within the operational environment only and will not be utilised during projects.	
Cooling Technicians	All sites - As required to meet SLA	• Certified cooling technician with a minimum of 3 years' experience for conducting preventative and corrective maintenance • Installations, troubleshooting, cleaning, maintenance and repairs • To be utilised within the operational environment only and will not be utilised during projects.	JNB & AVP – When required CPT – When required DUR – When required Regional Airports – When required
Mechanical Engineer HVAC Technicians	All Sites – As and when required to meet the SLA	• OEM Certified HVAC technician with a minimum of 3 years' experience for conducting preventative and corrective maintenance • Installations, troubleshooting, cleaning, maintenance and repairs • To be utilised within the operational environment only and will not be utilised during projects. • Preventive maintenance tasks, schedule, process and procedure will be part of the Provider's preventive maintenance plan.	All Sites – As and when required to meet the SLA
Fire Suppression	All Sites – As and when required to meet the SLA	• Certified Fire Suppression technician with a minimum of 3 years' experience in conducting preventative and corrective maintenance • Installations, troubleshooting, cleaning, maintenance and repairs • To be utilised within the operational environment only and will not be utilised during projects. • Preventive maintenance tasks, schedule, process and procedure will be part of the Provider's preventative maintenance plan.	Across all ACSA managed Sites – When required to meet SLA
Environmental Monitoring Team Resource (DCIM)	JNB – On-site for centralised monitoring	• Environmental Monitoring Resource based at JNB will also be responsible for all ACSA sites • Environmental Monitoring Resource to be available onsite 08h00 – 17h00 Monday – Friday • Certified DCIM technician with a minimum of 3 years' experience for conducting preventative and corrective maintenance • To be utilised within the operational environment only and will not be utilised during projects. • Preventative maintenance tasks, schedule, process and procedure will be part of the Providers preventative maintenance plan.	1 – JNB - Office hours

Table 5 - Minimum resource requirements

6.9 The provider will be liable to pay office rental space for any resources that are deemed necessary to be located onsite at any ACSA premises. The applicable rates must be agreed upon between the provider and the ACSA Property Department.

6.10 The provider will be liable to pay parking fees for any resources that are deemed necessary to be located onsite or perform work under this contract at any ACSA premises.

6.11 The provider will be liable for any fees and training necessary to obtain ACSA Security Permits for any resources that are deemed necessary to be located onsite or perform work under this contract at any ACSA premises.

6.12 Certified resources will be required onsite for support, preventative, and corrective maintenance of the services during below coverage windows.

<table>
<tr><th>Service Class</th><th>Service Coverage Window</th></tr>
<tr><td>Airport Operating Hours</td><td>
<table>
<tr><th>Airport</th><th>Earliest opening hour</th><th>Latest closing Hour</th></tr>
<tr><td>JNB</td><td>24-hour operation</td><td>24-hour operation</td></tr>
<tr><td>CPT</td><td>05:00</td><td>23:00</td></tr>
<tr><td>DUR</td><td>04:00</td><td>22:00</td></tr>
<tr><td>PLZ</td><td>05:00</td><td>22:00</td></tr>
<tr><td>ELS</td><td>05:00</td><td>21:30</td></tr>
<tr><td>GRJ</td><td>06:00</td><td>20:00</td></tr>
<tr><td>BFN</td><td>05:30</td><td>20:00</td></tr>
<tr><td>KIM</td><td>06:00</td><td>20:00</td></tr>
<tr><td>UTN</td><td>06:00</td><td>18:00</td></tr>
</table>
</td></tr>
<tr><td>Standard Office Hours</td><td>Normal Office Hours - 08:30 - 17:00 on Mon - Fri, excluding public holidays</td></tr>
<tr><td>Extended Office Hours</td><td>Normal Office Hours - 06:00 - 18:00 on Mon - Fri, excluding public holidays</td></tr>
<tr><td>Weekday After Hours</td><td>After Hours – 18:00 – 06:00 on Mon – Fri, excluding public holidays</td></tr>
<tr><td>Weekends</td><td>Weekend and Public Holidays – 24 Hours Saturday and Sunday, including public holidays</td></tr>
<tr><td>Project & IMACD</td><td>All project and IMACD tasks that impact the live environment will take place after the last flight has departed and before the first flight departs/arrives in the morning. These hours vary from airport to airport, but generally the provider can plan to run project tasks between 23h30 and 05h00, times are subject to change and will be communicated timeously</td></tr>
</table>

Table 6 - Service Coverage Window definitions

6.13 **Robust Resourcing Mode** - The provider must implement a resourcing model that ensures compliance with Service Level Agreements (SLAs) and supports service delivery during defined Service Coverage Windows, maintaining a full complement of resources at all times to avoid service disruptions.

6.14 **Resource Replacement** - In the event of an assigned resource's absence, the provider must promptly replace them with an equally qualified and competent resource who possesses the necessary access permits, training, and site-specific knowledge to maintain service continuity.

6.15 **Restricted Resource Allocation** - The provider must not deploy support resources to projects or Install, Move, Add, Change, and Delete (IMACD) activities, ensuring focus on core operational support.

6.16 **Safety Compliance** - The provider must compile and maintain a safety file following ACSA standards within the first month of service commencement. This file must be kept current, unless ACSA communicates that it is not required, ensuring adherence to safety protocols.

6.17 **Cable Technicians** - must be certified to work at heights to safely access equipment at elevated locations, ensuring compliance with safety and operational standards.

7.0 EQUIPMENT AND SPARES HOLDING REQUIREMENTS

7.1 **Technician Equipment** - The provider must equip all service technicians with appropriate tool kits and testing equipment to perform their duties efficiently, ensuring no delays in service delivery.

7.2 **ACSA-Provided Devices** - ACSA will supply laptops or desktops for permanent onsite resources, with the device type determined during the enablement request stage, ensuring compatibility with operational needs.

7.3 **Critical Spares Availability** - The provider must maintain sufficient critical spare parts at all locations to support maintenance activities and meet Service Level Agreements (SLAs), minimising downtime.

7.4 **Backup Stock for SLA Compliance** - If the provider's back-to-back agreement with the OEM cannot meet SLA requirements, the provider must maintain its own backup or loan stock to restore services within the specified maintenance SLA, ensuring uninterrupted operations**.**

7.5 **Quality Replacement Parts** - The provider must replace or repair faulty components using original, manufacturer-guaranteed new parts of the same or higher grade as the original. If an exact match is unavailable, a higher-grade component must be used. Replaced parts must be certified by the device manufacturer to ensure reliability and compatibility.

7.6 **Parts Storage and Obsolescence Management** - Within 60 days of contract award notification, the provider must establish a warehouse or secure storage facility to stock all necessary parts and components, including those for in-scope devices declared obsolete or no longer supported by manufacturers. This ensures full SLA compliance and uninterrupted service for all equipment.

Equipment	Minimum Quantity for Main Sites [JNB, DUR and CPT] KEPT ON SITE	Minimum Quantity for Smaller Sites KEPT ON SITE
Link Runner G2	2	1
Fusion Splice Machines	1	1
Optical time domain reflector meter	1	1
Digital cable analyser that complies with all TIA/ISO standards	1 (JNB X2)	1
Fibre optic cleaning kit that supports all types of connectors	1 (JNB X2)	1
Digital Toners and probe tracers	2	1
Wire map testers	3	1
HEPA vacuum cleaners	1 (JNB X2)	1
Roadworthy Airside Vehicle [medium commercial] branded, permitted, insured and not older than 30 months.	Sufficient vehicles with airside approval to ensure resources can be transported to point of work for both operations and projects. (Minimum 1 per site, on site)	Sufficient vehicles with airside approval to ensure resources can be transported to point of work for both operations and projects. (Minimum 1 per site, does not have to be on site)
Scissor Lift Electric and/or Cherry Picker	1 x JNB 1 x CPT 1 x DUR	(On Demand only or rented, borrowed by Service Provider at their cost to achieve SLA)

Equipment	Minimum Quantity for Main Sites [JNB, DUR and CPT] KEPT ON SITE	Minimum Quantity for Smaller Sites KEPT ON SITE
Crimpers	5	1
Industry-accepted data centre cleaning materials and equipment	1 month's stock	1 month's stock
Safety Signage and equipment: work in progress signs and barrier beacons.	20	5
Ladder (max height of 3m)	4	2
UTP and Fibre Cable testing equipment	4	1
Amp/ Voltmeter	2	1
Labelling machine inclusive of labels	2	1

Table 7 Minimum Spares Holding

7.7 The following stock must be replenished within 48 hours and kept onsite for the larger sites [JNB, DUR and CPT]:

Category	Description
UTP	
	CABLE C7 HC SFTP LSZH 600P (1000M)
	Cat7 patchlead (Orange)
	CAT6A 24 port Patch Panel (complete with modules)
	Cat7 FTP Module
	Powerskirting Plate
	50 x50 Collar
	25 x 50 Blank
	Shuttered Adapter
	KM8 RJ45 Modular Patchpanel ii
	RJ45 CAT 5 Connectors 8Pin
	Cat6A Keystone
	Brush Panel Long
	100 x 100 Gridplates Complete With Surround 2 Lever Grid Plate
	Copper Ten Jack STP Cat6A RJ45 WH
	Double Knockout Face Plate
	Double Knockout Face Plate Cradle
	S2000 Deco Duct (cradle & cover)
	Adaptor Mounting Plate
	RJ45 Grey Boots
	CABLE C7 HC SFTP LSZH 600P (2 x reels re -rolled) Estimate Qty
	CABLE C7 HC SFTP LSZH 600P (1000M)
	2m PC Cat6 S/FTP LSZH
	3m PC Cat6 S/FTP LSZH
	5m PC Cat6 S/FTP LSZH
	10m PC Cat6 S/FTP LSZH
	15m PC Cat6 S/FTP LSZH
	10m Cat6A Patch Cord F/UTP Blue
	Keystone - Amp - twist slx,6AS A10

Category	Description
	Outlet Cat6A STP SMK1 KM8 White
	Adaptor HK 45 DEG 25 x 50 White
	KM8 Cat6A STP RJ45 Jack WH
	CAT 6A Connectors
Fiber	
	24-Port LC Duplex Fibre Patch Panel
	13MM GREY ENTRY GLAND WITH LOCK NUT
	Splice Cassette PVC
	LC-LC Midcoupler Singlemode Simplex(SC FP)
	LC (9/125) Unjacketed Pigtail 1M
	LC-LC (09/125) duplex patch cord 1m
	LC-LC (09/125) duplex patch cord 3m
	LC-LC (09/125) duplex patch cord 10m
	LC-SC (09/125) duplex patch cord 1m
	LC-SC (09/125) duplex patch cord 3m
	LC-SC (09/125) duplex patch cord 5m
	LC-SC (09/125) duplex patch cord 10m
	SC-SC PATCH LEAD SM 3M
	SC-SC PATCH LEAD SM 5M
	OM4 20m MM Fibre LC-LC
	30M LC-SC SM FIBRE PATCH LEAD
	30M LC-LC SM FIBRE PATCH LEAD
	10M LC-SC SM FIBRE PATCH LEAD
	12 CR Multi Loose Tube (LSZH) (HDD) 9/125 (Orange)
	24 CR Multi Loose Tube (LSZH) (HDD) 9/125 (Orange)
	12 CR Multi Loose Tube (LSZH) (HDD) 50/125 (Orange)
	24 CR Multi Loose Tube (LSZH) (HDD) 50/125 (Orange)
	48 CR Multi Loose Tube (LSZH) (HDD) 9/125 (Orange)
	48 CR Multi Loose Tube (LSZH) (HDD) 50/125 (Orange)
	LC-LC MultiMode(OM4) 1m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 2m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 5m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 10m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 15m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 20m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 30m (Aqua Blue/ Purple)
	5m Fibre Lead Yellow SC/UPC - SC/UPC
	3m Fibre Lead Yellow SC/UPC - SC/UPC SM 9/125 duplex patch cord LSZH
	1.5m Fibre Lead Yellow SC-LC - Duplex Zipcord 9/125
	30M LC-SC SM FIBRE PATCH LEAD
	30M LC-LC SM FIBRE PATCH LEAD
	10M LC-SC SM FIBRE PATCH LEAD
Sundries	

Category	Description
	25mm Sprag
	Plastic Boxes 2 x 4
	25mm Pvc Coupling
	Conduit 25mm PVC Male Adaptor
	Conduit 25mm PVC Saddles
	Cable Ties 2.5mm T18R
	Cable Ties 148 x 3.5mm T30R
	Cable Ties 198 x 4.7mm T50R
	Cable Ties 300 x 4.6mm T50L
	Glue Cable Tube Clear 50ml
	Trunking 16 x 25 White YT2 3MTR
	Trunking 25 x40 Ega White YT4 3MTR
	OS1 Midcoupler SM LC Duplex
	Splice Protectors Heat Shrink 60mm
	Netshield Convertors - 10/100/1000Mbps Convertor 1300 - SM - 20km - SC
	Insulation Tape Black
	Extension Box 4 x 2
	Extension Box 4 x 4
	Blank Plate 4 x 2
	Blank Plate 4 x 4
	12mm black on white tape
	6mm black on white tape
	Double sided tape 18mm x 0.79mm
	Silicone sealer
	16mm black velcro 25mm roll
	1U Brush Panel no lip
	1U Blanking Panel Black
	Cage Nuts complete set M6 X 20
	Velcro 16mm black 25 m roll
Power Cords	
	1mt C13 – C14 Lockable power cord Black
	1mt C13 – C14 Lockable power cord Red
	1mt C19 – C20 Lockable power cord Black
	1mt C19 – C20 Lockable power cord Red
	1.5mt C13 – C14 Lockable power cord Black
	1.5mt C13 – C14 Lockable power cord Red
	1.5mt C19 – C20 Lockable power cord Black
	1.5mt C19 – C20 Lockable power cord Red
	2mt C13 – C14 Lockable power cord Black
	2mt C13 – C14 Lockable power cord Red
	2mt C19 – C20 Lockable power cord Black
	2mt C19 – C20 Lockable power cord Red

Table 8 Cabling stock items – JNB; CPT and DUR

7.8 The following stock must be replenished within 48 hours and kept onsite for the smaller sites [PLZ/ELS/GRJ/BFN/KIM/UTN]:

Category	Description
UTP	
	CABLE C7 HC SFTP LSZH 600P (1000M)
	Cat7 patchlead (Orange)
	CAT6A 24 port Patch Panel (complete with modules)
	Cat7 FTP Module
	Powerskirting Plate
	50 x50 Collar
	25 x 50 Blanlk
	Shuttered Adapter
	KM8 RJ45 Modular Patchpanel ii
	RJ45 CAT 5 Connectors 8Pin
	Cat6A Keystone
	Brush Panel Long
	100 x 100 Gridplates Complete With Surround 2 Lever Grid Plate
	Copper Ten Jack STP Cat6A RJ45 WH
	Double Knockout Face Plate
	Double Knockout Face Plate Cradle
	S2000 Deco Duct (cradle & cover)
	Adaptor Mounting Plate
	RJ45 Grey Boots
	CABLE C7 HC SFTP LSZH 600P (2 x reels re -rolled) Estimate Qty
	CABLE C7 HC SFTP LSZH 600P (1000M)
	2m PC Cat6 S/FTP LSZH
	3m PC Cat6 S/FTP LSZH
	5m PC Cat6 S/FTP LSZH
	10m PC Cat6 S/FTP LSZH
	15m PC Cat6 S/FTP LSZH
	10m Cat6A Patch Cord F/UTP Blue
	Keystone - Amp - twist slx,6AS A10
	Outlet Cat6A STP SMK1 KM8 White
	Adaptor HK 45 DEG 25 x 50 White
	KM8 Cat6A STP RJ45 Jack WH
	CAT 6A Connectors
Fiber	
	24-Port LC Duplex Fibre Patch Panel
	13MM GREY ENTRY GLAND WITH LOCK NUT
	Splice Cassette PVC
	LC-LC Midcoupler Singlemode Simplex(SC FP)
	LC (9/125) Unjacketed Pigtail 1M
	LC-LC (09/125) duplex patch cord 1m
	LC-LC (09/125) duplex patch cord 3m

Category	Description
	LC-LC (09/125) duplex patch cord 10m
	LC-SC (09/125) duplex patch cord 1m
	LC-SC (09/125) duplex patch cord 3m
	LC-SC (09/125) duplex patch cord 5m
	LC-SC (09/125) duplex patch cord 10m
	SC-SC PATCH LEAD SM 3M
	SC-SC PATCH LEAD SM 5M
	OM4 20m MM Fibre LC-LC
	30M LC-SC SM FIBRE PATCH LEAD
	30M LC-LC SM FIBRE PATCH LEAD
	10M LC-SC SM FIBRE PATCH LEAD
	12 CR Multi Loose Tube (LSZH) (HDD) 9/125 (Orange)
	24 CR Multi Loose Tube (LSZH) (HDD) 9/125 (Orange)
	12 CR Multi Loose Tube (LSZH) (HDD) 50/125 (Orange)
	24 CR Multi Loose Tube (LSZH) (HDD) 50/125 (Orange)
	48 CR Multi Loose Tube (LSZH) (HDD) 9/125 (Orange)
	48 CR Multi Loose Tube (LSZH) (HDD) 50/125 (Orange)
	LC-LC MultiMode(OM4) 1m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 2m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 5m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 10m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 15m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 20m (Aqua Blue/ Purple)
	LC-LC MultiMode(OM4) 30m (Aqua Blue/ Purple)
	5m Fibre Lead Yellow SC/UPC - SC/UPC
	3m Fibre Lead Yellow SC/UPC - SC/UPC SM 9/125 duplex patch cord LSZH
	1.5m Fibre Lead Yellow SC-LC - Duplex Zipcord 9/125
	30M LC-SC SM FIBRE PATCH LEAD
	30M LC-LC SM FIBRE PATCH LEAD
	10M LC-SC SM FIBRE PATCH LEAD
Sundries	
	25mm Sprag
	Plastic Boxes 2 x 4
	25mm Pvc Coupling
	Conduit 25mm PVC Male Adaptor
	Conduit 25mm PVC Saddles
	Cable Ties 2.5mm T18R
	Cable Ties 148 x 3.5mm T30R
	Cable Ties 198 x 4.7mm T50R
	Cable Ties 300 x 4.6mm T50L
	Glue Cable Tube Clear 50ml
	Trunking 16 x 25 White YT2 3MTR
	Trunking 25 x40 Ega White YT4 3MTR

Category	Description
	OS1 Midcoupler SM LC Duplex
	Splice Protectors Heat Shrink 60mm
	Netshield Convertors - 10/100/1000Mbps Convertor 1300 - SM - 20km - SC
	Insulation Tape Black
	Extension Box 4 x 2
	Extension Box 4 x 4
	Blank Plate 4 x 2
	Blank Plate 4 x 4
	12mm black on white tape
	6mm black on white tape
	Double sided tape 18mm x 0.79mm
	Silicone sealer
	16mm black velcro 25mm roll
	1U Brush Panel no lip
	1U Blanking Panel Black
	Cage Nuts complete set M6 X 20
	Velcro 16mm black 25 m roll
Power Cords	
	1mt C13 – C14 Lockable power cord Black
	1mt C13 – C14 Lockable power cord Red
	1mt C19 – C20 Lockable power cord Black
	1mt C19 – C20 Lockable power cord Red
	1.5mt C13 – C14 Lockable power cord Black
	1.5mt C13 – C14 Lockable power cord Red
	1.5mt C19 – C20 Lockable power cord Black
	1.5mt C19 – C20 Lockable power cord Red
	2mt C13 – C14 Lockable power cord Black
	2mt C13 – C14 Lockable power cord Red
	2mt C19 – C20 Lockable power cord Black
	2mt C19 – C20 Lockable power cord Red

Table 9 Cabling stock items - Regional airports

8.0 PREVENTATIVE AND CORRECTIVE MAINTENANCE

8.1 **Preventative Maintenance Scope** - Preventative maintenance encompasses planned overhauls, replacements, inspections, tests, software and firmware upgrades, patch management, and other proactive activities to maintain infrastructure condition and prevent failures, including assessments to inform corrective maintenance.

8.2 **Corrective Maintenance Scope** - Corrective maintenance includes all activities initiated following a preventative maintenance inspection to address identified issues, ensuring continued system reliability and performance.

8.3 **Break/Fix Maintenance** - Break/fix maintenance addresses unforeseen issues requiring urgent repairs to restore infrastructure serviceability and system functionality. This may include after-hours, weekend, or public holiday requests, and the provider must respond promptly to all faults.

8.4 **After-Hours Support** - The provider must provide callout-based support for incidents impacting systems during after-hours, weekends, and public holidays. Applicable hourly rates and callout fees must be detailed in the pricing schedule to ensure transparency.

8.5 **Emergency Callouts** - The provider must accommodate short-notice callouts for emergencies caused by system interruptions or airport change processes, providing site-specific callout rates and hourly fees to ensure rapid response and minimal disruption.

8.6 **Planned Activity Coordination** - For planned maintenance activities, ACSA will provide advance notice, and the provider must ensure resource availability as required to execute tasks efficiently.

8.7 **Accessible Support Contacts** - The provider must supply after-hours telephone numbers for reachable support personnel, ensuring constant availability. Any changes to these contact numbers must be promptly communicated to ACSA to maintain seamless support access.

8.8 **Maintenance Schedule Overview** - The Preventative Maintenance Schedules table outlines high-level maintenance tasks and checks to guide the provider's planning and execution of maintenance activities.

8.9 **Detailed Maintenance Plan** - The provider must submit a comprehensive preventative and corrective maintenance plan/schedule as part of the RFP response, incorporating the minimum requirements from the Preventative Maintenance Schedules table. The plan must detail remedial actions for issues identified during maintenance, including communication protocols (specifying the provider resource responsible, the ACSA recipient, communication format, timelines post-incident detection, and follow-up mechanisms), ensuring effective issue resolution and accountability.

Focus Area	High level maintenance task/checks description	Frequency
General	**General** • Visual and audible alerts inspections and investigations • Ensure the environment is within manufacturer specified operating conditions and clearances. • Document any environmental noncompliance issues and recommend appropriate action as necessary. • Document system condition and further service needs using a register approved by ACSA-IT • Auditing the environment • Labelling of equipment • Asset and inventory updates • Perform Environmental Inspection	Monthly Preventive Maintenance

Focus Area	High level maintenance task/checks description	Frequency
	• Address potential safety risks / hazards by recommending removal / decommissioning **Cooling** • Measure and record room temperature and humidity. • Check the system for adequate cooling capacity to support the load and make recommendations as necessary. • Check the system for adequate cooling capacity to support the load and make recommendations as necessary. • Check the condition of the drain pan and accumulation of debris in the pan. Clean as required.	
Cooling Systems	**Cleanliness** • Visual and audible alerts inspections and investigations • Auditing the environment • Labelling of equipment • Asset and inventory updates • Perform Environmental Inspection • Measure and record room temperature and humidity. • Check the system for adequate cooling capacity to support the load and make recommendations as necessary. • Ensure the environment is within manufacturer specified operating conditions and clearances. • Check the condition of return air filters. Change if necessary. • Check the condition of the drain pan and accumulation of debris in the pan. Clean as required. • Clean dust and debris from unit. • Check electrical connections. **Mechanical** • Check the fans. All equipment should be moving freely with no signs of binding or damages. • Verify that the condensate line is flowing freely. • Verify the chilled water supply temperature for cooling unit. • Chilled water supply temperature. • Verify set points for Outdoor Heat Exchanger and or Pump package if applicable. • Verify controller configuration and control set-points. • Verify operation of water regulation valves if applicable. • Check refrigeration pressures/temperatures/settings if applicable. • Check Glycol concentrations if applicable. • Check operation of group control if applicable • Confirm cleanliness of evaporator and condenser • Advise / recommend improvement for the infrastructure and identify potential risks within the environment • Check motor mounts/Pulleys/ Bearing set screws. • Check compressor operation if applicable. • Check operation of Outdoor Condenser/Pump package. • Check and verify component amperages.	Bi-Annual Minor Preventive Maintenance

Focus Area	High level maintenance task/checks description	Frequency
	• Verify unit modes of operation (Cooling/Reheat/Humidification/Dehumidification). • Verify operation of proportional chilled water actuator if applicable. • Check chilled water and/or condenser water supply temperature, if applicable. • Check drive belts, and return air filters. • Visually inspect refrigerant level if applicable. • Visually inspect for refrigerant and water/glycol condenser loop for leaks. • Verify proper condensate removal from unit. • Check System Operating Conditions • Review Alarm history and investigate logged alarms. • Confirm unit's ability to maintain temperature and humidity set-points: **Electrical** • Confirm the incoming main power matches the requirement's listed on the cooling unit's nameplate. • The measurement should be within 10% of the nameplate listing. • Check the system for adequate cooling capacity to support the load and make recommendations as necessary. • Verify main/control voltages. **Facility** • Air leaks, under floor hygiene, ceiling plenum, ducts, ceiling tiles, floor tiles, airflow in cabinets, blanking plates etc. **General** • Ensure the environment is within manufacturer specified operating conditions and clearances. • Document any environmental noncompliance issues and recommend appropriate action as necessary. • Document system condition and further service needs using a register approved by ACSA-IT • Clean dust and debris from unit. • Check electrical connections. • Address potential safety risks / hazards by recommending removal / decommissioning • Document any environmental noncompliance issues and recommend appropriate action as necessary	
Cooling Systems	**Cleanliness** • Visual and audible alerts inspections and investigations • Auditing the environment • Labelling of equipment • Asset and inventory updates • Perform Environmental Inspection • Measure and record room temperature and humidity. • Check the system for adequate cooling capacity to support the load and make recommendations as necessary. • Ensure the environment is within manufacturer specified operating conditions and clearances. • Check the condition of return air filters. Change if necessary.	Bi-Annual Major Preventive Maintenance

Focus Area	High level maintenance task/checks description	Frequency
	• Check the condition of the drain pan and accumulation of debris in the pan. Clean as required. • Clean dust and debris from unit. • Check electrical connections. **Mechanical** • Check the fans. All equipment should be moving freely with no signs of binding or damages. • Verify that the condensate line is flowing freely. • Verify the chilled water supply temperature for cooling unit. • Chilled water supply temperature. • Verify set points for Outdoor Heat Exchanger and or Pump package if applicable. • Verify controller configuration and control set-points. • Verify operation of water regulation valves if applicable. • Check refrigeration pressures/temperatures/settings if applicable. • Check Glycol concentrations if applicable. • Check operation of group control if applicable • Confirm cleanliness of evaporator and condenser • Advise / recommend improvement for the infrastructure and identify potential risks within the environment • Replace return air filters if required. • Check and lubricate bearings if applicable. • Check motor mounts/Pulleys/ Bearing set screws. • Check compressor operation if applicable. • Check operation of Outdoor Condenser/Pump package. • Check and verify component amperages. • Verify unit modes of operation (Cooling/Reheat/Humidification/Dehumidification). • Verify operation of proportional chilled water actuator if applicable. • Check chilled water and/or condenser water supply temperature, if applicable. • Check drive belts, and return air filters. • Visually inspect refrigerant level if applicable. • Visually inspect for refrigerant and water/glycol condenser loop for leaks. • Verify proper condensate removal from unit. • Check System Operating Conditions • Review Alarm history and investigate logged alarms. • Confirm unit's ability to maintain temperature and humidity set-points: **Electrical** • Before checking the electrical connections shut off and lock out the power to the cooling unit. • Inspect the electrical panel for tight connections and overheated connections from loose contact terminals. • Confirm the incoming main power matches the requirement's listed on the cooling unit's nameplate. • The measurement should be within 10% of the nameplate listing.	

Focus Area	High level maintenance task/checks description	Frequency
	• Check the system for adequate cooling capacity to support the load and make recommendations as necessary. • Verify main/control voltages. **Facility** • Air leaks, under floor hygiene, ceiling plenum, ducts, ceiling tiles, floor tiles, airflow in cabinets, blanking plates etc. **General** • Ensure the environment is within manufacturer specified operating conditions and clearances. • Document any environmental noncompliance issues and recommend appropriate action as necessary. • Document system condition and further service needs using a register approved by ACSA-IT • Clean dust and debris from unit. • Check electrical connections. • Address potential safety risks / hazards by recommending removal / decommissioning • Thermal imaging of core and data centre rooms, rows and cabinets. • Document any environmental noncompliance issues and recommend appropriate action as necessary	
Power Systems	• Perform a complete visual inspection of the equipment, including sub-assemblies, wiring harnesses, contacts, cables and major components. • Update service register noting alarms, status. • UPS load, alerts, fan, batteries and air filters. • Perform a status check of alarm circuits. (If Applicable). • ATS status. Switchgear and DB alerts. • Phase imbalances, visual inspections. • PDU condition, power cables to cabinet devices, electrical cable routing. • Perform a status check of alarm circuits. (If Applicable). Perform visual inspection of the appearance and cleanliness of the battery and the battery room where applicable. **Facility** Light fittings, Lights Clean any foreign material and dust from compartments.	Monthly
Fire Suppression System	**General** • Perform the OEM recommended preventative maintenance on all critical IT electrical Infrastructure within the Data Centre; Core Room and Wire Centre • Advise all personnel working in or near to the protected area of possible audible / visual alarms Before carrying out any further checks ensure the extinguishing system is isolated electrically and mechanically, remove all electrical and pneumatic actuators **Electrical** • Systems with automatic electrical detection (coincidence operation) • Place the system in automatic mode and check lamps on control panel and all status units	Quarterly

Focus Area	High level maintenance task/checks description	Frequency
	• Operate one detection zone • Check fire alarm sounds (first alarm only) • Check extinguishant release solenoid does not operate • Switch system to manual mode and check lamps are green on control panel and all status units • Operate second detection zone • Check extinguishant release solenoid does not operate • Switch system to automatic mode with two detection zones still in alarm • Check evacuation alarm sounds • Check extinguishant release solenoid operates after pre-determined time delay • Reset the fire alarm system Reset system. Ensure frangible element are refitted to manual release units **Ancillary Tests** • Confirm all A/C systems are linked into the extinguishing system to shutdown prior tom or upon release of gas and these have been checked. **Mechanical Check List** Pipe work / Nozzles: • Check that the pipe work has not been altered or tampered with since the last visit • Check all nozzles are fitted in accordance with the design requirements and are aimed in the correct alignment away from obstruction or barriers that could prevent adequate distribution of mixing of the gas. • Check all pipes and nozzles are adequately braced against the reaction to discharge • Check pipe work has been painted and / or properly identified Containers: • Check containers are safe from mechanical damage, corrosion or unauthorised interference • Check container racking and bracketry is complete and correctly fitted • Check all containers are fitted with instruction plates properly completed Ancillary Checks: • Check pneumatic actuation tubing is firmly fixed and connection are tight • Check any dampers are closed and / or fire curtains drop correctly to fully cover openings • Check that a container pressure indicator is fitted to each container and is indicating the container pressure correctly and that is has been checked for leaks • Check pressure gauges are fitted to any pilot cylinders • Check solenoid flexible lead is correctly fitted and secured using fixing screw • Upon completion of all checks ensure solenoid is reset and fit the pilot cylinder and ensure it is fully tightened by hand • Ensure local manual actuator is reset and fit to pilot cylinders and ensure it is fully tightened by hand • Check door caution plates are fitted at all doors into protected areas	

Focus Area	High level maintenance task/checks description	Frequency
	• Check manual release caution plates are fitted at all manual control points Enclosure Integrity: • Confirm that a Room Integrity Test has been performed on the protection areas • Record whether a satisfactory retention time was achieved • If not, visually inspect the protected area and record any leakage sites i.e. at cable entries	

Room Category	Focus Area	High level maintenance task/checks description	Frequency
Data Centres	Security Systems	Cameras live footage and stored footage. Access control mag lock force test, push buttons and review log/user records, visual inspections.	Weekly
	Safety Systems	Alerts on fire panels, service dates of suppressants, VESDA alerts. Emergency exits and systems, visual inspections.	
	Cabinets and Equipment and flooring	Equipment power supplies, dust/air filters, surface dust, alignment, levelled, cleaned, visual inspections.	
	Cabling Plant	Neatness, cable ties, Labels, bends, remove unused cables, visual inspections. etc.	
	Facility	Light fittings, Door locks/closers. Floor surfaces [deterioration] water supply leaks, outdoor plant facilities, delivery gate, removal of unwanted vegetation around gen-sets /transformers/air cons, wipe walls, cleaning, visual inspections.	
Core Centre	Security Systems	Cameras live footage and stored footage. Access control mag lock force test, push buttons and review log/user records, visual inspections.	Every 2 Weeks
	Safety Systems	Alerts on fire panels, service dates of suppressants, emergency systems, visual inspections.	
	Cabinets and Equipment and flooring	Equipment power supplies, dust/air filters, surface dust, alignment, levelled, cleaned, visual inspections, cabinet extractor fans	
	Cabling Plant	Neatness, cable ties, Labels, bends, remove unused cables, visual inspections. etc.	
	Facility	Light fittings, Door locks/closers. Floor surfaces [deterioration, wipe walls, cleaning. All installations, visual inspections.	
Wire Centre	Cabinets and Equipment and flooring	Equipment power supplies, dust/air filters, surface dust, alignment, levelled, cleaned, visual inspections, cabinet extractor fans	2 Monthly
	Cabling Plant	Neatness, cable ties, Labels, bends, remove unused cables, visual inspections. etc.	
	Security Systems	Cameras live footage and stored footage. Access control mag lock force test, push buttons and review log/user records, visual inspections.	
	Safety Systems	Alerts on fire panels, service dates of suppressants, emergency systems, visual inspections.	

Room Category	Focus Area	High level maintenance task/checks description	Frequency
	Facility	Light fittings, Door locks/closers. Floor surfaces [deterioration, wipe walls, cleaning. All installations, visual inspections.	

Table 7 - Preventative Maintenance Schedule

9.0 BASELINE INFORMATION

9.1 Service Requirements Baseline: This section summarizes key information relevant to determining service requirements, reflecting ACSA's projected needs from the contract's start date. The provider must maintain and update this baseline, reviewing it quarterly with ACSA IT Infrastructure to ensure alignment with evolving requirements.

9.2 Data Accuracy: The information provided in the associated tables was accurate at the time of tender creation. However, additions or subtractions may have occurred since then, and the provider is responsible for validating and updating this data as needed.

Region	Airport Name	UTP Copper Data Points	Wire Centre	Core Centres	Data Centres
Cluster 1	OR Tambo International Airport	35 000	225	12	2
	Aviation Park	500	6	3	0
	Bram Fischer Airport	300	7	1	0
Cluster 2	Cape Town International Airport	15 000	95	4	2
	George Airport	300	11	1	0
	Kimberley Airport	300	5	1	0
	Upington International Airport	250	5	1	0
Cluster 3	King Shaka International Airport	10 000	80	6	2
	Chief Dawid Stuurman International Airport	1 000	12	2	0
	King Phalo Airport	500	10	2	0

Table 10 Baseline information

9.3 Agreements and Licenses

Equipment Item Code	Description	Renewals
MPS-AP94VMACT -	StruxureWare Data Center Expert 1 Virtual Machine Activation Key	Yearly renewed, maintenance and subscriptions
MPS-AP951000	StruxureWare Data Center Expert, 1000 Node License Only	Yearly renewed, maintenance and subscriptions
MPS-AP91200	Data Center Operation: Capacity 200 Rack License	Yearly renewed, maintenance and subscriptions
MPS-AP90000	Data Center Operation: Energy Efficiency License	Yearly renewed, maintenance and subscriptions
MPS-AP9135	Data Center Operation: Energy Cost License	Yearly renewed, maintenance and subscriptions
MPS-WMS1YRVM	1 Year StruxureWare Data Center Expert Virtual Machine Software Support	Yearly renewed, maintenance and subscriptions

Equipment Item Code	Description	Renewals
MPS-WMS1YR1000N	1 Year 1000 Node StruxureWare Data Center Expert Software Support	Yearly renewed, maintenance and subscriptions
MPS-WMS1YR100N	1 Year 100 Node StruxureWare Data Center Expert Software Support	Yearly renewed, maintenance and subscriptions
MPS-WOPS1YR200	StruxureWare Data Center Operation, 1 Year Software Support Contract, 200	Yearly renewed, maintenance and subscriptions
MPS-WCAM1YR200	Data Center Operation: Capacity, 1 Year Software Support Contract, 200	Yearly renewed, maintenance and subscriptions
MPS-WEE1YR	Data Center Operation: Energy Efficiency, 1 Year Software Support Contract	Yearly renewed, maintenance and subscriptions
MPS-AP95500	StruxureWare Data Center Expert, 500 Node License Only	Yearly renewed, maintenance and subscriptions
MPS-AP900500	StruxureWare Data Center Operation 500 Rack License	Yearly renewed, maintenance and subscriptions
MPS-WMS1YR500N	1 Year 500 Node StruxureWare Data Center Expert Software Support	Yearly renewed, maintenance and subscriptions
MPS-WOPS1YR500	StruxureWare Data Center Operation, 1 Year Software Support Contract, 500	Yearly renewed, maintenance and subscriptions

Table 11 StruxureWare Services Agreements and Licences

10.0 ASSET OWNERSHIP STATUS

10.1 The following table provides a summary of the asset ownership

Asset Category	Ownership	Comments
IT Facilities		
Physical Building	ACSA	ACSA to fund any changes
Power	ACSA	
Cooling	ACSA	
Fire Suppression	ACSA	
Security	ACSA	
Environmental Monitoring	ACSA	
Remote monitoring capability	SP	If the proposed solution were owned by the Provider
Cooling Infrastructure		
Cooling Infrastructure	ACSA	
Cabinets	ACSA	
Testing tools etc.	SP	SP to provide its own tools and testing equipment
CM & Asset	ACSA	These record repositories are provided by ACSA

Table 12 Asset Ownership

11.0 CURRENT OEM DEPLOYMENTS

11.1 The following table provides a summary of the current OEMs deployed.

Device Type	Manufacturers
Environmental monitoring systems	Schneider Netbotz
Equipment Racks	Modrac and Rittal
Outdoor Enclosures	Rittal Enviroracks and IP55 outdoor enclosures including air-con unit.
Data Centres	Rittal modular / container data centres
Split Units	Dunham Bush or York units with easily available parts
In-row	Uniflair
DX	No Standard
Chilled Water/Glycol	No Standard
Hot/Cold Aisle	No Standard
Fire Supression	Novec 1230
Fire Detection	Vesda 250
Hand Held Fire Extinguishers	CO2
UTP Cabling	Orange Cat 7 SFTP LSZH
Fibre Optics	Single mode with orange sleeve. LC only.
Patch Panels, terminating equipment	Cat 6A Commscope, Molex, Telegarthner
Brush Panels	Commscope, Molex, Telegarthner
Fibre Optics	Multi-mode and Single-mode fibre patch leads with green sleeve. LC-LC only.

Table 13 Current OEMs deployed

12.0 OUT OF SCOPE

The following items are specifically excluded from the scope of work:

12.1 Any Cooling/HVAC and Electrical Infrastructure outside of the ACSA IT Datacentre, Core Room and Wire Centre Facilities environment

13.0 ROLES AND RESPONSIBILITIES

In this SOW, we use the RASCI ("responsible, accountable, supporting, consulted and informed") chart approach for all roles and responsibilities matrices.
The RACI terminology is as follows:

Code	Role	Role Detail Description	
R	Responsible	An individual operationally responsible for performing a sourcing activity. Responsible individuals report to the Accountable individual.	Only one individual is accountable for any given activity. Responsible is a proactive role.
A	Accountable	An individual with final accountability for the results of a sourcing activity. Accountability includes a mandate to dismiss or accept the results by activity as realised by the Responsible individual. This individual also holds the budget to back the mandate.	Only one individual is accountable for any given activity. Accountable is a reactive role.
S	Supporting	Individuals who support the Responsible individual in realising the sourcing activity. They actively participate in realising/executing/performing the activity. Supportive individuals report to the Responsible individual.	Multiple individuals can participate in support of the Responsible individual for any given activity. Supporting is a proactive role.
C	Consulted	Individuals who should be consulted in realising/executing/performing the activity, on the scope, budget, time and value of the activity.	Multiple individuals can be required to be heard for any given activity. Consulting is a reactive role.
I	Informed	Individuals who need to be informed but have no role in the realisation/execution/performance of an activity, other than being informed of the result of the activity.	Multiple individuals can be informed of the results of any given activity. Informed is a passive role.

Table 14 - Definition of RASCI Model

The following table identifies the roles and responsibilities associated with this SOW

13.1 **Roles and Responsibilities- General**

Sub area	Number	Task/Activity	provider	ACSA
General	1.	Provide Services and the supporting processes that support ACSA's business needs, technical requirements and End-User requirements	R, A	C
	2.	Approve Services and the supporting processes that support ACSA's business needs, technical requirements and End-User requirements	I	R
	3.	Comply with ACSA policies, guiding principles, standards and regulatory requirements applicable to the ACSA for information, information systems, personnel, physical and technical security	R, A	C
	4.	Develop and maintain an approved comprehensive Standards and Procedures Manual that contains the standards, processes and procedures that will be used in the delivery of all Services. The manual will include clearly delineated roles and responsibilities, touch points and measurements between ACSA and the vendor.	R, A	C
	5.	Approve the comprehensive Standards and Procedures Manual that contains the standards, processes and procedures that will be used in the delivery of all Services. The manual will include clearly delineated roles and responsibilities, touch points and measurements between ACSA and the vendor.	I	R
	6.	Conform to changes in laws, regulations and policies. Major Service Changes shall be proposed on a project-by-project basis to alter the environment to conform to the new requirements.	R	C, A
	7.	Report performance against Service-Level Requirements (SLRs)	R, A	I
	8.	Coordinate all Changes to the IT systems that may affect the SLRs of any other Service	R, A	C, I
	9.	Provide timely creation, updating, maintenance and provision of all appropriate project plans, project time and cost estimates, technical specifications, management documentation and management reporting in a form/format that is acceptable to the ACSA for all Service projects and major Service activities	R, A	C
	10.	Adhere to IT service management (ITSM) best practices and Key Performance Indicators (KPIs)	R, A	I
	11.	Approve the use of the ITSM best practices and KPIs	C, I	R
Site Access	12.	Coordinate with site IT staff to schedule an On-Site Technical Support visit when using non-standard or 3rd party resources	R, A	C, I
	13.	Ensure that all support staff have valid airside permits for the airports that they support.	R, A	C, I
	14.	Ensure that support staff strictly adheres to the terms and conditions of their permit allowances	R, A	C, I
	15.	Ensure that support staff have access to reliable transport and valid driver's licences. This includes access services provider vehicles that is permitted on airside, should there be a requirement to support any device on airside. The operator must have a valid Airport Vehicle Operators Permit (AVOP). The vehicle requires a regulatory permit and must be insured as per ACSA requirements.	R, A	C, I

Sub area	Number	Task/Activity	provider	ACSA
	16.	Ensure that support staff are capable of supporting infrastructure that is located at above normal height, such as indoor Access Points or external Access Points located on Airside. Support staff must have the relevant safety certifications, protective wear and equipment to carry out corrective maintenance duties.	R, A	C, I
	17.	Ensure that the provider always has a valid health and safety file	R, A	C, I
	18.	On request from the provider, ACSA will provide access to ACSA premises (which will not be unreasonably withheld) to the provider or their 3rd party personnel to effect maintenance and repairs	I	R,A
	19.	Parking fees at ACSA premises	R, A	I
	20.	Rental of office space at ACSA premises	R, A	I
	21.	Any security-related training and payments for access to ACSA premises	R, A	I

Table 15 - Roles and Responsibilities – General

13.2 Roles and Responsibilities - Management, Planning and Design

Architecture, Planning, and Analysis Services are the activities required to assess the requirements for architectural, functional, performance, IT Service Continuity, and security requirements

Activities associated with documenting the requirements for architectural, functional, performance, IT Service Continuity, and security requirements

Include identifying the opportunities to improve the efficiency and effectiveness of the Service.

It can also help support competitive business advantage and mitigate risks by reducing defects and improving the quality of IT Services. Look at the current and how to bring in efficiencies and improvements

Sub area	Number	Task/Activity	provider	ACSA
Architecture Planning and Analysis	1.	Adhere to, implement and ensure alignment to the defined standards, timeframes and reporting requirements for planning, project management and analysis activities.	R, A	C,S,I
	2.	Attend and actively participate in the ACSA scheduled focus groups, stakeholder meetings, project and technical workshops to provide the required expertise (addressing all tasks pre and post the meeting as required, such as requirements gathering activities; solution design options)	R,A	C,S,I
	3.	Provide input into the review of the existing Services, architectural standards and project management practices for Planning and Analysis activities to ensure continuous alignment to best practise.	R, A	C,S,I
	4.	Ensure all documentation remains updated in the required ACSA format. (including but not limited to upgrade requirements, conversion requirements, design schematics, WC/CR/DC floor plans, design diagrams). Where no existing documentation is available, the standards are to be followed, and documentation is to be drafted.	R, A	C,I
	5.	Define Services, standards, timeframes and reporting requirements for planning, project management, and analysis activities	C,S,I	R,A

Sub area	Number	Task/Activity	provider	ACSA
	6.	Schedule the required focus groups and technical workshops for architecture planning and analysis requirements – such as to review the existing infrastructure topologies at an enterprise (e.g., technology strategy, technology architecture, functional, availability, capacity, performance, backup and IT Service Continuity)	S,I	R,A
	7.	Provide ACSA documentation format standards. Review and approve the updated documentation presented by the Service provider	I	R,A
	8.	Review and update the existing Services, standards and project management practices for Planning and Analysis activities	I	R,A
Technical Architecture	9.	Attend, actively participate in and provide technical assistance and subject matter expertise in technical and business planning sessions to review standards, architecture and project initiatives to align with best practise	R,A	C,S,I
	10.	Document current and future Technical Architecture in the agreed formats and update these throughout the service lifecycle	R,A	C,S,I
	11.	Evaluate new equipment considered for implementation in compliance with the ACSA's security and IT architecture policies, regulations and procedures.	C,S,I	R,A
	12.	Define and approve any new architecture standards	C,S,I	R,A
	13.	Conduct technical and business planning sessions to review standards, architecture and project initiatives to align with best practices	R,A	C,S,I
Continuous Improvement and Innovation Planning	14.	Conduct technical reviews and provide recommendations for improvements that increase efficiency, effectiveness and reduce costs	R,A	C,I
	15.	Perform ad hoc investigations as requested by ACSA and submit recommendations for ACSA's consideration.	R,A	C,I
	16.	Conduct ongoing, regular planning and recommendations for technology refresh and upgrades	R,A	C,I
	17.	Showcase new technology enhancements to ACSA, hence allowing ACSA the option to upgrade to any new productised technology.	R,A	C,I
	18.	Review and approve any technical improvement recommendations	C,I	R,A
	19.	Review and approve any requested ad hoc investigations	C,I	R,A
	20.	Review and approve recommendations for technology refresh and upgrades	C,I	R,A
	21.	Review any new technology enhancements presented	C,I	R,A
Management and Testing Tools	22.	Use existing System management tools to monitor, measure, manage and document the environment.	R,A	C,I
	23.	Provide access to existing System management tools to monitor measure, manage and document the environment.	C,I	R,A
Research	24.	Provide expert advice and research the latest technologies on a constant basis and formally submit these presentations to ACSA IT Infrastructure on a 3-monthly basis.	R,A	C,I
	25.	Participate in in-scope IT-Commercial initiatives as requested ACSA-IT – this includes understanding the required solution and outcome, provide solution design and architecture documentation relating to this service towner	C,I	R,A

Sub area	Number	Task/Activity	provider	ACSA
	26.	Together with ACSA-IT, perform feasibility studies for the implementation of new and existing technologies that best meet ACSA business needs and meet cost, performance and quality objectives.	R,A	C,I
	27.	Review the latest technologies presented by the Service provider.	C,I	R,A
	28.	Request provider to participate in in-scope IT-Commercial initiatives.	C,I	R,A
Design and panning	29.	Develop, document and maintain detailed technical design/engineering plans and environment configuration based on ACSA's business requirements	R,A	C,I
	30.	Provide design documentation for quarterly audits as requested by ACSA	R,A	C,I
	31.	Provide input into design plans through coordination with the appropriate ACSA technology standards groups and design architects	C,I,S	R,A
	32.	Quarterly audit of design documentation	C,I,S	R,A
	33.	Adhere to production acceptance test criteria	R,A	C,I
	34.	Conduct and document test plans and results	R,A	C,I
	35.	Define and document production acceptance test criteria	C,I	R,A
	36.	Review and approve test plans and results	C,I	R,A

Table 16 - Roles and Responsibilities - Management, Planning and Design

13.3 Roles and Responsibilities - Project Management Services

ACSA may, from time to time, request that the provider perform a discrete set of activities in addition to the ongoing services obligations. (a "Project").

Sub area	Number	Task/Activity	provider	ACSA
Project Management Approach	1.	Utilise project management methodologies, knowledge, skills, tools, and techniques consistent with leading internationally recognised and accepted project management practices, such as those contained in the Guide to the Project Management Body of Knowledge (PMBOK) or Prince2 Align to all ACSA Project Office methodology requirements, governance and documentation – use the ACSA-provided templated and naming convention	R,A	C,I
	2.	Perform project management review and oversight, attend scheduled project meetings, ensure key milestones are achieved by the Service provider, ensure all ACSA project governance processes are in place and are being achieved throughout the project	C,I	R,A
Define Project Plan	3.	Provide project definition and plan, identify major critical milestones, ensure delivery within budget and project deliverables are aligned and approved by the ACSA Project Manager	R,A	C,I
	4.	Provide, maintain and update detailed project planning, identify critical path dependencies.	R,A	C,I
	5.	Approve project plan, critical milestones, budget forecast, and project deliverables	C,I	R,A
	6.	Attend scheduled weekly project meetings to review the detailed project plan and critical path dependencies	C,I	R,A

Sub area	Number	Task/Activity	provider	ACSA
Manage Execution of the Project	7.	Manage, follow up and track execution of the project plan.	R,A	C,I
	8.	Ensure project plan management activities are carried out, and ensure updated communication to project stakeholders is done.	C,I	R,A
Monitor Project Progress	9.	Report on project progress, budget, risk, and issues	R,A	C,I
	10.	Review and escalate any issues, risks, etc., for action to higher governance authorities as required	C,I	R,A

Table 17 - Roles and Responsibilities - Project Management Services

13.4 Roles and Responsibilities - Acquisition and Management

The acquisition and management process includes the purchase of all service equipment, including new equipment, upgrades to existing equipment, or purchases resulting from a service or repair request. Also, maintains buying catalogue, executes purchase orders, provides quotations, and deals with goods handling.

Sub area	Number	Task/Activity	provider	ACSA
Policies, Processes, Standards and Procedures	1.	When procurement is requested by ACSA-IT, the provider to adhere to the acquisition/procurement policies	R,A	C,I
	2.	Guide ACSA acquisition/procurement policies	C,I	R,A
	3.	Develop, document and maintain in the Standards and Procedures Manual Acquisition and Management procedures that meet requirements and adhere to defined policies	R,A	C,I
	4.	Review and approve Acquisition and Management procedures	C,I	R,A
	5.	Perform periodic audits of procurement procedures	R,A	C,I
Demand Management	6.	Escalate any acquisition and management issues to ACSA-IT, notify ACSA immediately upon learning of item shortages, and notify ACSA-IT of out-of-line (e.g. out-of-stock occurrences) deliveries.	R,A	C,I
	7.	Attend monthly review sessions to understand the estimated consumption forecast, where available, to ensure the achievement of timelines	R,A	C,I
	8.	Address any acquisition and management escalations from the Service provider	C,I	R,A
	9.	Quarterly, ACSA shall provide the Service provider with its estimated consumption forecast of all in-scope infrastructure equipment. The forecast process will be a joint effort between ACSA and the provider using historical data.	C,I	R,A
Equipment Delivery	10.	Ensure all equipment is delivered as scheduled. No uncommunicated delays in delivery will be accepted by ACSA-IT. Any delays are to be communicated in writing and in the relevant meeting (project meeting) to allow for review and any possible business impacts	R,A	C,I
	11.	Request updates on equipment delivery timelines in the relevant meetings (project meetings, etc.)	C,I	R,A

Sub area	Number	Task/Activity	provider	ACSA
Standards Compliance	12.	Ensure that new equipment/ hardware complies with established ACSA standards and architectures	R, A	C,I
	13.	Ensure all procured hardware and software are listed as part of the ACSA architecture technology standards	C,I	R,A
Goods Handling and Warehousing	14.	Provide facilities for spares holding nationally at the provider's Locations.	R,A	C,I
	15.	Securely store and insure equipment at designated Service Locations (as agreed with ACSA)	R,A	C,I
	16.	Control and manage the equipment in a secure and auditable manner.	R,A	C,I
	17.	Manage the physical movement (appropriate packing and transportation) of service in scope equipment as required and agreed with ACSA	R,A	C,I
	18.	Allow ACSA audits when requested by ACSA	R,A	C,I
	19.	Inspect the provider's location nationally to confirm the required security is in place	C,I	R,A
	20.	Provide proof of valid insurance coverage for equipment held by the provider on ACSA's behalf	R,A	C,I
	21.	Ad hoc inspections of equipment being moved to insure appropriate packaging and transportation	C,I	R,A
Equipment Invento	22.	Maintain adequate equipment inventory levels in accordance with SLA obligations.	R,A	C,I
	23.	Report on stock levels quarterly	R,A	C,I

Table 18 - Roles and Responsibilities - Acquisition and Management

13.5 Roles and Responsibilities - Documentation

Documentation Services are the activities associated with developing, revising, archiving, maintaining, managing, reproducing, and distributing information (e.g., project planning materials, System design specifications, Procedures Manuals, operations guides) in hard copy and electronic form.

Sub area	Number	Task/Activity	provider	ACSA
Documentation	1.	Ensure that the entire in scope infrastructure is well documented and constantly updated	R,A	C,I
	2.	Compile a checklist and all documentation for carrying out of maintenance tasks related to in scope infrastructure (detailed maintenance plan). Provide exception reports where risks and issues cannot be addressed via the maintenance plan	R,A	C,I
	3.	A detailed checklist template will be presented to the ACSA for approval.	R,A	C,I
	4.	Specify the content, purpose, format and production schedule of all documents	R,A	C,I
	5.	Store all copies of documents on ACSA Microsoft Teams sites provided.	R,A	C,I
	6.	Review and approve in scope documentation to ensure infrastructure is well documented and constantly updated	I	R,A
	7.	Review checklist and implement action plans based on any exception reports and recommendations	I	R,A
	8.	Work with provider to specify the content, purpose, format and production schedule of all documents within scope	C,I	R,A

Sub area	Number	Task/Activity	provider	ACSA
	9.	Provide space to store physical copies of all document and a share folder for digital copies of the documents	I	R,A
	10.	Provide timely creation, updating, maintenance and provision of all documentation, (design documents; architectural diagrams; as built documents; test plans; all ACSA required project documentation; technical specifications, preventative and corrective maintenance plans and checklist; escalation reports; daily service request report; floor layout diagrams; OEM and third party documentation and management reporting in a form/format that is acceptable to ACSA for Service Projects and major Service activities	R,A	C,I
	11.	Manage all documentation in accordance with Configuration Management standards and guidelines	R,A	C,I
	12.	Document standard operating procedures (e.g., boot, failover/disaster recovery/COOP, spool management, batch processing, backup)	R, A	I
	13.	Review and approve standard operation procedures Documentation	I	R,A

Table 19 - Roles and Responsibilities - Documentation

13.6 Roles and Responsibilities - Technology Refresh and Replenishment

Technology Refreshment and Replenishment (TR&R) Services are the activities associated with modernising the IT environment on a continual basis, to ensure that the system components stay current with evolving industry-standard technology platforms.

Sub area	Number	Task/Activity	provider	ACSA
Technology Refresh and Replenishment	1.	Recommend TR&R life cycle management policies, procedures and plans appropriate for support of ACSA business requirements	R, A	C, I
	2.	Develop, document and maintain in the Standards and Procedures Manual TR&R procedures, and develop TR&R plans that meet requirements as well as adhere to defined policies and Change and Release Management processes	R, A	C, I
	3.	Review and approve TR&R policies, procedures and plans	I	R, A
	4.	Perform the necessary tasks required to fulfil the TR&R plans	R, A	I
	5.	Provide management reports on the progress of the TR&R plans	R, A	I
	6.	Periodically review the approved TR&R implementation plans to ensure they properly support ACSA business requirements	I	R, A

Table 20 - Roles and Responsibilities - Technology Refresh and Replenishment

13.7 Roles and Responsibilities - Infrastructure Build and Change

Managing all infrastructure changes [standard, low, med, high risk] within all operations and projects of the airports. This includes initiating change requests and closing out change requests
IMACDs will be treated as projects when the following is met:
• Ad hoc IT related installation requests from IT Commercial
• Upgrades to any existing or live facility
• Hardware decommissioning
• Hardware installation

Sub area	Number	Task/Activity	provider	ACSA
Installations and Additions	1.	Complete IMACD plan per installation and addition	R,A	C,I
	2.	Present IMACD plan to ACSA for approval	R,A	C,I
	3.	Complete IMACD (including but not limited to, appliances, switches, fibre link etc. Installations and additions per approved IMACD plan (timelines / tasks / pre-installation checks / UAT etc.)	R,A	C,I
	4.	Receive and review IMACD plan per installation and addition presented by Service provider	I	R,A
	5.	Approve IMACD plans received from Service provider	I	R,A
	6.	Approve and sign off IMACD installations and additions in alignment with approved plans	I	R,A
Moves	7.	Complete IMACD plan per installation and addition	R,A	C,I
	8.	Present IMACD plan to ACSA for approval	R,A	C,I
	9.	Complete IMACD (including but not limited to, appliances, switches, fibre link etc. Installations and additions per approved IMACD plan (timelines / tasks / pre-installation checks / UAT etc.)	R,A	C,I
	10.	Receive and review IMACD plan per installation and addition presented by Service provider	I	R,A
	11.	Approve IMACD plans received from Service provider	I	R,A
	12.	Approve and sign off IMACD installations and additions in alignment with approved plans	I	R,A
Changes	13.	Recommend changes to meet service requirements	R,A	C,I
	14.	Perform changes to meet business requirements (including but not limited to e.g., switch replacement, Ethernet and fibre modules etc.)	R,A	C,I
	15.	Review and approve recommended changes presented by the provider where required	I	R,A
	16.	Sign off implemented changes	I	R,A
Decommission	17.	Complete IMACD plan per decommission requirement	R,A	C,I
	18.	Present IMACD plan to ACSA for approval	R,A	C,I
	19.	Complete IMACD decommission per approved IMACD plan (timelines / tasks / pre-decommission checks / UAT etc.)	R,A	C,I
	20.	Disposal of equipment and materials in accordance with ACSA policies upon request.	R,A	C,I
	21.	Receive and review IMACD plan per decommission by Service provider	I	R,A
	22.	Approve IMACD plans received from Service provider	I	R,A
	23.	Approve and sign off IMACD decommission in alignment with approved plans	I	R,A
	24.	Sign off the disposal of equipment and materials in accordance with ACSA policies with Service provider, and ensure financial asset disposal tasks are completed	I	R,A

Sub area	Number	Task/Activity	provider	ACSA
IMACD Completion Sign-Off	25.	Conduct and document production acceptance tests and provide results to obtain signed completion form (production acceptance) from ACSA	R,A	C,I
	26.	All works must have before, during and after photos taken which will be submitted with the handover pack. This applies to every task, including removal of old electrical cabling and piping, new installations, upgrades to existing facilities, etc. Photographs may be combined with video recordings. This form of documentation will be required during audits, meetings, etc.	R,A	C,I
	27.	Maintain and update records to ensure the baseline CMDB is always up-to-date	R,A	C,I
	28.	Review acceptance test and results for sign off	I	R,A
	29.	Review before during and after photos taken during changes	I	R,A
	30.	Review CMDB baseline reports quarterly as defined in the report schedule	I	R,A

Table 21 - Roles and Responsibilities - Infrastructure Build and Change

13.8 Roles and Responsibilities – Maintenance

Maintenance Services are the activities associated with the maintenance and repair of hardware, software to include "break/fix" Services. Installed platform and product version levels are not to be more than one version behind the current commercial release, unless coordinated with the ACSA architectural standards committee.

Sub area	Number	Task/Activity	provider	ACSA
Maintenance	1.	Define Maintenance requirements	I	R, A
	2.	Develop, document and maintain in the Standards and Procedures Manual Maintenance procedures that meet requirements and adhere to defined policies	R, A	I
	3.	Develop Maintenance schedules (OEM-recommended preventative maintenance to be taken into account)	R, A	
	4.	Review and approve Maintenance procedures and schedules	I	R, A
	5.	Ensure appropriate Maintenance coverage for all Service components	R, A	C, I
	6.	Provide Maintenance and break/fix support in ACSA's defined locations, including dispatching repair technicians to the point-of-service location if necessary	R, A	C, I
	7.	Perform (and/or coordinate with Third-Party Maintenance Vendor if applicable) diagnostics and maintenance on Service components, including hardware, software, peripherals and special-purpose devices as appropriate	R, A	C, I
	8.	Perform an analysis of the impact and/or applicability of Vendor-provided (e.g., Omni) patches and/or service packs, in accordance with ACSA policies and requirements	R, A	C, I
	9.	Approve Vendor-provided patches and/or service packs	C, I	R, A
	10.	Review all patches relevant to the IT environment and classify the need and speed at which the Security patches should be installed, as defined by policies and Change Management	R, A	C, I
	11.	Install patches per ACSA's Change Management process and procedures including acquiring required ACSA approval	R, A	C, I
	12.	Install (and/or coordinate with Third-Party Maintenance Vendor if applicable) manufacturer field change orders,	R, A	C, I

Sub area	Number	Task/Activity	provider	ACSA
		service packs, firmware and software maintenance releases, etc.		
	13.	Perform (and/or coordinate with Third-Party Maintenance Vendor if applicable) product patch, "bug fix," service pack installation or upgrades to the current installed version	R, A	C, I
	14.	Perform Maintenance-related software distribution and version control, both electronic and manual	R, A	C, I
	15.	Replace (and/or coordinate with Third-Party Maintenance Vendor if applicable) defective parts, including preventive Maintenance, according to the manufacturer's published mean-time-between-failure rates	R, A	I
	16.	Conduct (and/or coordinate with Third-Party Maintenance Vendor if applicable) Maintenance and parts management, and monitoring during warranty and off-warranty periods	R, A	I
	17.	Execute preventative maintenance per the high-level schedule, which needs further development by the provider responding to this RFP. The following activities will constitute the minimum requirements. o Inspections and alerts investigations o Syslog analysis – Continuous monitoring and responding with corrective actions to warnings and alerts. o Health Checks o Configuration Backups o Log Analysis o Device performance monitoring for high memory and CPU utilisation o Software upgrades on management systems o Capacity Management o User Management o Redundancy Testing o IOS and Firmware Upgrades o Fibre Connectivity Performance Testing o Advise/recommend improvement for the infrastructure and identify potential risks within the environment, including detailed additional preventative maintenance recommendations which, as experts in the field, are deemed necessary to prevent system failures	R,A	C,I
	18.	Initiate projects to execute on approved preventative maintenance recommendations	I,C	R,A
	19.	Provide detailed monthly reports on capacity, assets, changes, faults, potential risks, etc. as defined in the report schedule	R,A	C,I

Table 22 - Roles and Responsibilities – Maintenance

13.9 Roles and Responsibilities - Infrastructure Monitoring, Operations and Administration

Monitoring, Operations and Administration Services of all in scope infrastructure are the activities associated with providing a stable environment thus ensuring a proactive approach to risk mitigation and will aid the provider to meet their SLA targets.

Management of the Infrastructure will always be done in consultation with ACSA-IT Infrastructure and Operations, and no decisions can be made without approvals and written consent of ACSA

Sub area	Number	Task/Activity	provider	ACSA
Management and Administration	1.	Utilise ACSA Monitoring tools to monitor the infrastructure that will meet the monitoring and service level reporting requirement	R,A	C,I
	2.	Implement measures for proactive monitoring to limit infrastructure outages.	R,A	C,I
	3.	Manage all in scope infrastructure elements in accordance with ACSA's policies (including security oversight and change management policies)	R,A	C,I
	4.	Manage and coordinate provider appointed subcontractors and Third Parties to meet Service and SLA requirements	R,A	C,I
	5.	Suggest any additions or changes to ACSA monitoring tools landscape	R,A	C,I
	6.	Install, customise and maintain the infrastructure management system for event monitoring and availability reporting.	I	R,A
	7.	Implement measures for proactive monitoring to limit infrastructure outages	I	R,A

Table 23 - Roles and Responsibilities - Infrastructure Monitoring, Operations and Administration

13.10 Roles and Responsibilities - Availability Management

The goal of Availability Management is to understand the overall availability requirements of ACSA's business needs and to plan, measure, monitor and continuously strive to improve the availability of the IT Infrastructure, services and supporting IT organization to ensure these requirements are met consistently, with a focus on providing cost-effective availability improvements that deliver measurable ACSA business benefits.

Availability Management covers the evaluation, design, implementation, measurement and management of the IT Infrastructure Availability from a component and an end-to-end perspective (i.e., Services), including new or modified IT Service Management methodologies and tools, as well as technology modifications or upgrades of IT Infrastructure systems and components. The goal of the Availability Management process is to optimize the capability of the IT Infrastructure, services and supporting organization to deliver a cost-effective and sustained level of Availability that enables the business to satisfy its business objectives.

Key activities of the Availability Management process are as follows:

- Determining business unit availability requirements for a new or enhanced IT Service and formulating the availability and recovery design criteria for the IT Infrastructure to ensure IT Services are designed to deliver the appropriate levels

- Determining the critical business functions and impact arising from IT component failure. Where appropriate, reviewing the availability design criteria to provide additional resilience to prevent or minimize impact to the business.

- Identifying opportunities to optimize the availability of the IT Infrastructure to deliver cost-effective improvements that deliver tangible business benefits

- Supporting the targets for availability, reliability and maintainability for the IT Infrastructure components that underpin the IT Service, to enable these to be documented and agreed within SLAs and contracts
- Establishing measures and reporting of availability, reliability and maintainability that reflect the business, End-User and IT support organization perspectives
- Monitoring and trend analysis of the availability, reliability and maintainability of IT systems and components
- Reviewing IT Service, system and component availability, identifying unacceptable levels and ensuring appropriate corrective actions are taken to address IT availability shortfalls
- Investigating the underlying reasons for unacceptable availability and providing recommendations for resolution
- Producing and maintaining a forward-looking Availability Plan, which prioritizes and plans overall IT availability improvements aimed at improving the overall availability of IT Services and Infrastructure components to ensure that existing and future business availability requirements can be met
- Providing IT availability reports to ensure that agreed levels of availability, reliability and maintainability are measured and monitored on an ongoing basis

Sub area	Number	Task/Activity	provider	ACSA
Availability Management	1.	Establish criteria and SLRs for Availability Management support requirements, including IT systems and services to be covered	C, I	R, A
	2.	Develop Availability Management policies, process and procedures, and determine appropriate Availability Management tools and methods that support ACSA's Availability Management support requirements	R, A	I
	3.	Participate in the development of Availability Management policies, process and procedures, and identify the tools and availability methods to be used	I	R, A
	4.	Review and approve Availability Management policies, processes and procedures	I	R, A
	5.	Implement agreed-upon Availability Management policies, processes and procedures	R, A	I
	6.	Provide unrestricted read access by ACSA-authorized staff and designated personnel to all current and historical availability knowledgebase data and records	R, A	I
	7.	Ensure that availability requirements are included when requirements are identified, when upgrading and/or designing new IT systems and services to support business users	I	R, A
	8.	Participate in user requirements gathering and analysis when upgrading and/or designing new IT systems and services, to ensure that they are designed to deliver the required levels of availability (mapped to the SLRs) required by the business	R, A	I
	9.	Create availability and recovery design criteria to be applied to upgrades and/or new or enhanced infrastructure design	R, A	I
	10.	Participate in creating availability and recovery design criteria to be applied to upgrades and/or new IT Infrastructure system and services design	I	R, A
	11.	Coordinate with the IT service support and IT service delivery process owners and managers from ACSA to research, review and assess Availability issues and optimization opportunities	R, A	C, I
	12.	Define the availability measures and reporting required for the IT Infrastructure and its components that underpin an upgraded	I	R, A

Sub area	Number	Task/Activity	provider	ACSA
		and/or new IT Service, as the basis for an SLA that reflects business, End-User and IT support organization requirements		
	13.	Participate with ACSA in defining the availability measures and reporting requirements	R, A	I
	14.	Recommend appropriate tools and practices to measure and report on agreed-upon availability measures for upgraded and/or enhanced IT Infrastructure	R, A	I
	15.	Review and approve availability measurement tools and practices	I	R, A
	16.	Ensure that approved availability measurement tools and practices are implemented	R, A	I
	17.	Monitor and maintain an awareness of technology advancements and IT best practices related to availability optimization, and periodically provide updates to ACSA IT management	R, A	I
	18.	Ensure that all Availability Management improvement initiatives conform to defined Change Management procedures set forth in the Process and Procedures Manual	R, A	I
	19.	Coordinate and take ownership of Availability Management across all IT service areas within ACSA and Third-Party Service Vendors (e.g., public carriers, Internet service providers, Third-Party providers, etc.)	R, A	I
	20.	Participate in Problem Management review sessions as appropriate, specifically those problems related to outages of critical systems	R, A	C, I
	21.	Monitor actual IT availability achieved versus targets and ensure shortfalls are addressed promptly and effectively	R, A	I
	22.	Conduct Availability Assessment review sessions and provide cost-justified improvement recommendations	R, A	I
	23.	Participate in availability improvement review sessions	I	R, A
	24.	Review and approve cost-justifiable improvement recommendations that ACSA deems appropriate to enhance ACSA IT and business performance needs	I	R, A
	25.	Coordinate with ACSA and Third-Party Service Vendors to gather information on IT systems and service availability issues and trends, to be used for trend analysis	R, A	I
	26.	reduce and maintain an Availability Plan that prioritizes and plans approved IT availability improvements	R, A	I
	27.	Review and approve Availability Plan	I	R, A
	28.	Provide IT availability reporting to ensure that agreed levels of availability, reliability and maintainability are measured, reported and monitored on an ongoing basis	R, A	I
	29.	Promote Availability Management awareness and understanding within all IT support organizations, including Third-Party Service Vendors	R, A	I
	30.	Perform regular (e.g., quarterly) reviews of the Availability Management process and its associated techniques and methods to ensure that all are subjected to continuous improvement and remain fit for purpose	R, A	I
	31.	Periodically audit the Availability Management process to ensure that it continues to deliver desired results in compliance with agreed-upon policies, processes and procedures	I	R, A

Table 24 - Roles and Responsibilities - Project Management Services

13.11 **Roles and Responsibilities - Capacity Management**

Capacity Management Services are the activities associated with ensuring that the capacity of the Service matches the evolving demands of ACSA business in the most cost-effective and timely manner. The process encompasses the following:

- Monitoring of performance and throughput of IT Services and supporting IT components
- Understanding current demands and forecasting for future requirements
- Developing capacity plans which will meet demand and SLRs
- Developing modelling and conducting simulations to manage capacity
- Conducting risk assessment of capacity recommendations
- Developing and implementing a capacity plan, including the financial impact of the Service
- Undertaking tuning activities

Sub area	Number	Task/Activity	provider	ACSA
Capacity Management	1.	Define Capacity Management requirements	I	R, A
	2.	Develop, document and maintain in the Standards, Process and Procedures Manual Capacity Management procedures that meet requirements and adhere to defined policies	R, A	I
	3.	Review and approve Capacity Management process and procedures	I	R, A
	4.	Establish a comprehensive Capacity Management planning process	R, A	I
	5.	Review and approve Capacity Management planning process	I	R, A
	6.	Define, develop and implement tools that allow for the effective capacity monitoring/trending of IT Infrastructure, applications and IT components	R, A	I
	7.	Identify future business requirements that will alter capacity requirements	I	R, A
	8.	Develop a periodic (usually yearly) capacity plan, including quarterly updates	R, A	I
	9.	Develop and implement capacity models and run simulations to validate the capacity plan	R, A	I
	10.	Participate in all capacity planning activities	I	R, A
	11.	Assess capacity impacts when adding, removing or modifying applications and infrastructure components	R, A	I
	12.	Continually monitor IT resource usage to enable proactive identification of capacity and performance issues	R, A	I
	13.	Capture trending information and forecast future ACSA capacity requirements based on ACSA-defined thresholds	R, A	I
	14.	Assess incidents/problems related to capacity and provide recommendations for resolution	R, A	I
	15.	Recommend changes to capacity to improve service performance	R, A	I
	16.	Assess impact/risk and cost of capacity changes	R, A	I
	17.	Approve capacity-related recommendations	I	R, A
	18.	Maintain capacity levels to optimize use of existing IT resources and minimize ACSA costs to deliver Services at agreed-to SLRs	R, A	I
	19.	Ensure adequate capacity exists within the IT environment to meet SLRs and requirements, taking into account daily, weekly and seasonal variations in capacity demands	R, A	I
	20.	Validate asset utilization and capital efficiency	I	R, A

Table 25 - Roles and Responsibilities - Capacity Management

13.12 **Roles and Responsibilities - Performance Management**

Performance Management Services are the activities associated with managing and tuning Service components for optimal performance. The process encompasses the following:

- Monitoring of performance and throughput of IT Services and supporting IT components
- Assessing the results of the reports
- Conducting trending analysis
- Providing recommendations to tune
- Performing tuning activities
- Updating on a periodic basis (at least annually)

Sub area	Number	Task/Activity	provider	ACSA
Performance Management	1.	Define Performance Management requirements	I	R, A
	2.	Develop, document and maintain in the Standards, Process and Procedures Manual Performance Management procedures that meet requirements and adhere to defined policies	R, A	I
	3.	Review and approve Performance Management procedures	I	R, A
	4.	Perform Service component tuning to maintain optimum performance in accordance with Change Management procedures	R, A	I
	5.	Manage Service component resources (e.g., devices and traffic) to meet defined Availability and performance SLRs	R, A	I
	6.	Provide monitoring and reporting of Tower component performance, utilization and efficiency based on specified time frame and sequence (e.g., monthly)	R, A	I
	7.	Proactively evaluate, identify and recommend configurations or changes to configurations that will enhance performance	R, A	I
	8.	Conduct trending analysis to recommend changes to improve the performance based on specified time frame and sequence (e.g., monthly)	R, A	I
	9.	Develop and deliver improvement plans as required to meet SLRs based on specified time frame and sequence (e.g., monthly)	R, A	I
	10.	Review and approve improvement plans		R, A
	11.	Implement improvement plans and coordinate with Third Parties as required	R, A	I
	12.	Provide technical advice and support to the application maintenance and development staffs as required	R, A	I

Table 26 - Roles and Responsibilities - Performance Management

13.13 Roles and Responsibilities - Configuration Management

Configuration Management Services are the activities associated with providing a logical model of the devices or assets (including software licenses) and their relationships by identifying, controlling, maintaining and verifying installed hardware, software and documentation (i.e., maintenance contracts, SLA documents, etc.).

The goals are to account for all IT assets and configurations, provide accurate information on configurations, provide a sound basis for Incident, Problem, Change and Release Management, and to verify configuration records against the infrastructure and correct any exceptions. The following table identifies the Configuration Management roles and responsibilities that provider and ACSA will perform

Sub area	Number	Task/Activity	provider	ACSA
Configuration Management	1.	Define Configuration Management requirements	I	R, A
	2.	Develop, document and maintain in the Standards Process and Procedures Manual Configuration Management procedures that meet requirements and adhere to defined policies	R, A	I
	3.	Review and approve Configuration Management procedures and processes	I	R, A
	4.	Identify and document the configuration item structure	R, A	I
	5.	Approve the configuration item structure	I	R, A
	6.	Establish Configuration Management database, in accordance with ACSA requirements	R, A	I
	7.	Review and approve Configuration Management database	I	R, A
	8.	Select and provide Configuration Management tools	I	R, A
	9.	Install and maintain Configuration Management tools	R, A	I
	10.	Enter/upload configuration data into configuration database	R, A	I
	11.	Establish process interfaces to Incident and Problem Management, Change Management, technical support, maintenance and Asset Management processes	R, A	I
	12.	Establish appropriate authorization controls for modifying configuration items and verify compliance with software licensing	R, A	I
	13.	Establish guidelines for physical and logical separation between development, test and production and the process for deploying and back-out of configuration items	I	R, A
	14.	Develop procedures for establishing configuration baselines as reference points for rebuilds, and provide ability to revert to stable configuration states	R, A	I
	15.	Develop procedures for establishing security baselines as reference points for rebuilds, and provide ability to revert to stable configuration states	I	R, A
	16.	Establish procedures for verifying the accuracy of configuration items, adherence to Configuration Management process and identifying process deficiencies	R, A	I
	17.	Provide a deficiency report and steps taken to address the issues identified	R, A	I
	18.	Provide ACSA Configuration Management reports as required and defined by ACSA	R, A	I
	19.	Audit Configuration Management process and accuracy of configuration data	I	R, A

Table 27 - Roles and Responsibilities - Configuration Management

13.14 **Roles and Responsibilities - Asset Management**

Asset Management Services are the activities associated with process of the ongoing management and tracking of the life cycle of existing, Service components (e.g., hardware, software and software licenses, maintenance, circuits) and their attributes (i.e., location, costs, depreciation, contracts, vendor, serial numbers, etc.).

Sub area	Number	Task/Activity	provider	ACSA
Asset Management	1.	Define Asset Management requirements	C, I	R, A
	2.	Recommend improvements to Asset Management requirements and policies	R, A	C, I
	3.	Develop, document and maintain in the Standards and Procedures Manual Asset Management process and procedures that meet requirements and adhere to defined policies	R, A	C, I
	4.	Review and approve the Asset Management process and procedures	C, I	R, A
	5.	Deploy an Asset Management system that meets ACSA requirements and adheres to defined policies	C, I	R, A
	6.	Maintain and manage an Asset Management system that meets ACSA requirements and adheres to defined policies	R, A	C, I
	7.	Manage life cycle of all assets from identification, requisition ordering, inventory, installation and maintenance to disposal	R, A	I
	8.	Develop asset type list and attributes that would be included in the Asset Management system	I	R, A
	9.	Review asset type list and attributes and maintain asset types and attributes in the Asset Management system	R, A	I
	10.	provide ACSA inquiry and reporting access into the Asset Management system for all assets	R, A	I
	11.	Maintain the accuracy of the data of in-scope assets in the Asset Management system, according to SLRs	R, A	I
	12.	Provide electronic feed file of asset data for various ACSA-defined systems (e.g., financial system, ACSA internal billing system)	R, A	I
	13.	Establish, update and maintain the asset database to include, at a minimum, the following asset attributes: • Manufacturer • Model • Serial number • Identification number • Location • Ownership information (provider/ACSA — lease/purchase) • Cost information • Maintenance information and history, including the age of the asset • Warranty information • Other billing information (e.g., lease information, ACSA-specific information) • Transaction edit history (e.g., locations, billing and user)	R, A	I
	14.	Update in-scope asset records related to all approved change activities (e.g., install/move/add/change activities, break/fix activities, company reorganization and Change Management)	R, A	I
	15.	Perform ongoing physical asset audit, in accordance with Asset Management SLRs, to validate that data in the database is accurate and current	R, A	I
	16.	Provide reports of Asset Management audit results	R, A	I
	17.	Provide and, upon ACSA approval, implement the Asset Management remediation plan for Asset Management deficiencies	R, A	I

Sub area	Number	Task/Activity	provider	ACSA
	18.	Review and approve audit reports and remediation plans of asset inventory management information	C, I	R, A
	19.	Provide reports of ACSA asset financial information, including depreciation, maintenance contracts and value of assets	R, A	I
	20.	Affix Asset Tags supplied by ACSA according to the relevant procedures.	R, A	I
	21.	Conduct periodic/ad hoc quality assurance audit of Asset Management system	I	R, A

Table 28 - Roles and Responsibilities - Asset Management

13.15 Roles and Responsibilities - Software License Management

Software License Management Services are the activities associated with the identification, acquisition and disposal as well as ongoing management and tracking of software and their corresponding licenses

Sub area	Number	Task/Activity	provider	ACSA
Software License Management	1.	Define Software License Management requirements	C, I	R, A
	2.	Recommend improvements to Software License Management requirements and policies	R, A	I
	3.	Develop, document and maintain in the Standards and Procedures Manual Software License Management procedures that meet requirements and adhere to defined policies as mapped to Asset Management	R, A	I
	4.	Review and approve Software License Management processes and procedures	I	R, A
	5.	Manage and maintain (e.g., monitor, track status, verify, audit, perform contract compliance, reassign) software licenses and media through software license life cycle	R, A	C, I
	6.	For ACSA-retained contracts, be responsible for procurement, renewal and upgrade costs, and vendor agreements	I	R, A
	7.	For non-ACSA-retained contracts, be responsible for procurement, renewal and upgrade costs, and vendor agreements	R, A	C, I
	8.	Develop and maintain inventory of all Software licenses within the Asset Management system	R, A	I
	9.	Report to ACSA on any exceptions to Vendor terms and conditions including license non-compliance	R, A	I
	10.	Periodically (at least yearly), conduct software license and maintenance agreements review, allowing for sufficient time prior to expiration for negotiations	R, A	I
	11.	Participate in software license and maintenance agreements review	I	R, A
	12.	Provide ACSA with reports and recommendations to use in making software acquisition and discontinuance decisions	R, A	I
	13.	Provide recommendations to purchase additional license allocation, recommending alternatives or curtailing usage where necessary and appropriate, to restore or continue to maintain license compliance	R, A	I
	14.	Identify and report license compliance issues to ACSA and provide recommendations to resolve the compliance issue	R, A	I
	15.	Review license compliance issues and document completed resolution	I	R, A
	16.	Manage and perform audits and reconcile the number of licenses to the number of installs, as requested by ACSA	R, A	I

Sub area	Number	Task/Activity	provider	ACSA
	17.	Provide recommendations to ACSA to resolve any software reconciliation issues	R, A	I
	18.	Report on resolution to software reconciliation issues	I	R, A
	19.	Obtain approval from ACSA for any license change or replacement	R, A	I

Table 29 - Roles and Responsibilities - Software License Management

13.16 Roles and Responsibilities - Change Management

Change Management Services are activities to ensure that standardized methods and procedures are used for efficient and prompt handling of all changes, in order to minimize the impact of change upon Service quality and consequently to improve the day-to-day operations of ACSA.

Change Management covers all aspects of managing the introduction and implementation of all changes affecting all Towers and in any of the management processes, tools and methodologies designed and utilized to support the Service components.

The Change Management processes and activities are inter-related and complementary with Release Management and Configuration Management, as well as Incident Management and Problem Management.

The Change Management process includes the following process steps:

- Determining metrics for measuring effectiveness of a change
- Request for change (RFC) process
- Recording/tracking process
- Prioritization process
- Responsibility assignment process
- Impact/risk assessment process
- Participation in IT service continuity and DR planning
- Coordination of the Change Advisory Board (CAB)
- Review/approval process
- Establishing and managing the schedule of approved changes
- Implementation process
- Verification (test) process
- Closure process

Sub area	Number	Task/Activity	provider	ACSA
Change Management	1.	Define Change Management policies and requirements, including change priority schema and classifications, per the Change Management process components outlined above	I	R, A
	2.	Develop Change Management procedures and processes per the Change Management process components outlined above	R, A	I
	3.	Review and approve Change Management process, procedures and policies	I	R, A
	4.	Receive and document all RFCs and classify proposed changes to the Services, which shall include change cost, risk impact assessment and system(s) security considerations	R, A	I
	5.	Review and validate that RFCs comply with Change Management policies, procedures and processes	I	R, A
	6.	Ensure that appropriate back-out plans are documented and in place in the event of systems failure as a result of the change	R, A	I
	7.	Provide Change Management plan to ACSA for review	R, A	I
	8.	Approve Change Management plan	I	R, A
	9.	Develop and maintain a schedule of planned approved changes (Forward Schedule of Changes [FSC]) for ACSA to review	R, A	I

Sub area	Number	Task/Activity	provider	ACSA
	10.	Coordinate, schedule and conduct CAB meetings to include review of planned changes and results of changes made, ensuring that all appropriate parties are invited and represented in accordance with approved CAB policies	R, A	I
	11.	Participate in CAB meetings as ACSA deems appropriate or necessary	I	R, A
	12.	Provide change documentation as required, including proposed metrics as to how effectiveness of the change will be measured	R, A	I
	13.	Review and approve change documentation and change effectiveness metrics	I	R, A
	14.	Review and approve any RFC determined to have a cost, security or significant risk impact to ACSA's IT systems or business	I	R, A
	15.	Authorize and approve scheduled changes or alter the schedule change requests as defined in the Change Management procedures	I	R, A
	16.	Publish and communicate the approved FSC to all appropriate IT and business unit stakeholders within ACSA of change timing and impact	I	R, A
	17.	Oversee the approved change build, test and implementation processes to ensure these activities are appropriately resourced and completed according to change schedule	R, A	I
	18.	Ensure that thorough testing is performed prior to release and assess ACSA business risk related to any change that is not fully tested prior to implementation	I	R, A
	19.	Participate in business risk assessment for the change to be introduced without being fully tested	R, A	I
	20.	Monitor changes, perform change reviews and report results of changes, impacts and change effectiveness metrics	R, A	I
	21.	Verify that change met objectives based upon predetermined effectiveness metrics, and determine follow-up actions to resolve situations where the change failed to meet objects	R, A	I
	22.	Review and approve Change Management results	I	R, A
	23.	Close out RFCs that met the change objectives or changes that were abandoned	R, A	I
	24.	Perform Change Management quality control reviews and audits of Change Management processes and records	c, I	R, A
	25.	Provide ACSA Change Management reports as required and defined by ACSA	R, A	c, I

Table 30 - Roles and Responsibilities - Change Management

13.17 **Roles and Responsibilities - Training and Knowledge Transfer**

Training and Knowledge Transfer Services consist of the following three types of training provider will provide:

- Training for the improvement of skills through education and instruction for the provider's staff. The provider will participate in any initial and ongoing training delivered by ACSA as required, that would provide a learning opportunity about ACSA's business and technical environment.
- Training for ACSA-retained technical staff for the express purpose of exploiting the functions and features of the ACSA computing environment. Delivery methods may include classroom-style, computer-based, individual or other appropriate means of instruction.
- Selected classroom-style and computer-based training (case-by-case basis) for standard COTS and Software as a Service (SaaS) applications, including new employee training, upgrade classes and specific skills.

Sub area	Number	Task/Activity	provider	ACSA
Training and Knowledge Transfer	1.	Define Training and Knowledge Transfer requirements	I	R, A
	2.	Develop, document and maintain in the Standards and Procedures Manual Training and Knowledge Transfer procedures that meet requirements and adhere to defined policies	R, A	C, I
	3.	Review and approve Training and Knowledge Transfer procedures	I	R, A
	4.	Develop and deliver training program to instruct ACSA personnel on the provision of provider Services (e.g., "rules of engagement," requesting Services)	R, A	C, I
	5.	review and approve provider-developed training program	I	R, A
	6.	Develop, implement and maintain a ACSA-accessible knowledge database/portal	R, A	C, I
	7.	Develop and implement Knowledge Transfer procedures to ensure that more than one individual understands key components of the business and technical environment	R, A	C, I
	8.	anticipate in ACSA-delivered instruction on the business and technical environment	R, A	C, I
	9.	Develop, document and deliver training requirements that support the ongoing provision of ACSA Services, including refresher courses as needed and instruction on new functionality	R, A	C, I
	10.	Take training classes as needed to remain current with systems, software, features and functions for which help desk support is provided, in order to improve Service performance (e.g., First-Contact Resolution)	R, A	C, I
	11.	Provide training when substantive (as defined between ACSA and provider) technological changes (e.g., new systems or functionality) are introduced into ACSA environment, in order to facilitate full exploitation of all relevant functional features	R, A	C, I
	12.	Provide training materials for ACSA technical staff for Level 1-supported applications	R, A	C, I
	13.	Provide ongoing training materials for help desk personnel on ACSA business and technical environments, as defined by ACSA	R, A	C, I
	14.	Provide ACSA-selected classroom-style and computer-based training (case-by-case basis) for standard COTS applications, as requested by ACSA	R, A	C, I

Table 31 - Roles and Responsibilities - Training and Knowledge Transfer

13.18 **Roles and Responsibilities - Account Management**

Account Management Services are the activities associated with the ongoing management of the Service environment.

Sub area	Number	Task/Activity	provider	ACSA
Management	1.	Define Account Management requirements	I	R, A
	2.	Develop, document and maintain in the Standards Process and Procedures Manual Account Management procedures that meet requirements and adhere to defined policies	R, A	I
	3.	Review and approve Account Management process and procedures	I	R, A
	4.	Develop a detailed "IT" catalogue that details Services offered, including all Service options, pricing, installation time frames, order process (new, change and remove service) and prerequisites	R, A	I
	5.	Approve Service catalogue	I	R, A
	6.	Develop a Service ordering process that clearly defines how to order, change or delete Services	R, A	C, I
	7.	Recommend criteria and formats for administrative, Service activity and Service-Level Reporting	R, A	C, I
	8.	Review and approve criteria and formats for administrative, Service activity and Service-Level Reporting	I	R, A
	9.	Develop and implement customer satisfaction program for tracking the Quality of Service (QoS) delivery to End Users	R, A	I
	10.	Review and approve customer satisfaction program for tracking the QoS delivery to End Users	I	R, A
	11.	Provide reporting (e.g., statistics, trends, audits, customer satisfaction results)	R, A	I
	12.	provider to ensure the appropriate resource model is assigned to the account, including relationship manager, project managers, delivery manager, technical managers, etc.. The relationship manager will be the single point of contact between the provider and ACSA-IT	R,A	I
Meetings	13.	Actively participate in meetings as defined in the report and meeting schedule.	R,A	I
	14.	Ensure any planning is done prior to the meetings	R,A	I
	15.	Ensure reports and any required documents are circulated prior to the meeting	R,A	I
	16.	Ensure all actions documented from the meetings are addressed	R,A	I
	17.	Produce minutes of the meetings	R,A	I
Risk Management	18.	Participate in regular reviews of the risk exposure of the relationship and overall transaction between ACSA and Service provider.	R,A	I
	19.	Inform ACSA of any immediate risks requiring urgent attention	R,A	I
	20.	Co-develop risk mitigation strategies	R,A	I

Table 32 - Roles and Responsibilities - Account Management

13.19 Roles and Responsibilities - Incident Resolution and Problem Management

The activities associated with restoring normal service operation as quickly as possible and to minimize the adverse impact on ACSA business operations, thus ensuring that the best possible levels of service quality and availability are maintained.

Problem Management also includes minimizing the adverse impact of Incidents and Problems on the business that are caused by errors in the in-scope Infrastructure, and to prevent the recurrence of Incidents related to those errors. In order to achieve this goal, Problem Management seeks to get to the root cause of incidents and then initiate actions to improve or correct the situation.

Sub area	Number	Task/Activity	provider	ACSA
Incident Resolution and Problem Management	1.	Adhere to ACSA Problem Management process and procedures	R, A	I
	2.	Provide ACSA Problem Management process and procedures	I	R, A
	3.	If the provider requires calls to be logged to their service desk, an integration between ACSA and provider service desk must be provided by Service provider. All accountability and associated costs are for the Service provider. No manual call logging to provider's Service Desk will be in scope for ACSA. Any failure in communication between ACSA and The provider's service desk does not constitute grounds to miss SLA as the ACSA service desk is the tool to measure SLA	R, A	I
	4.	Accept, update and close calls as per service level agreements using the ACSA_IT call logging system.	R, A	I
	5.	Provide, configure and operate Incident and Problem Management system that tracks Incidents	I	R, A
	6.	Perform incident and problem management per ACSA process and procedures, which includes, but is not limited to : o Perform event management monitoring of the Services to detect abnormal conditions or alarms, log abnormal conditions, analyse the condition and take corrective action o Manage entire Incident/Problem life cycle including detection, diagnosis, status reporting, repair and recovery o Coordinate and take ownership of problem resolution by managing an efficient workflow of incidents including the involvement of Third Party providers (e.g., vendors). o Assign problems to L2 & L3 technical maintenance and repair staff as required o Review the state of open Problems and the progress being made in addressing these problems. o Interact on a regular basis with the IT service desk to ensure optimised efficient level of service delivery [scheduled meetings, reports, etc.]. o Updates must be provided to the service desk in a professional, timely manner in both verbal and in written formats [using the call logging application] o Manage and coordinate subcontractors and third parties in order to meet resolve Incidents/Problems	R, A	I,C

Sub area	Number	Task/Activity	provider	ACSA
		o Upon rectification of the Incident/Problem, the provider will immediately notify ACSA helpdesk that the Incident/Problem has been resolved o Update all change configuration databases prior to closing any call.		
	7.	ASCA-IT Engineer to review Incident and Problem management tasks by the provider in Monthly Care Review Meetings to ensure the provider is completing tasks in accordance to the ACSA process and procedures	I	R, A
	8.	Provide a status report detailing the Incident and Problem Management logs as defined in the reporting schedule	R, A	I,

Table 33 - Roles and Responsibilities - Incident Resolution and Problem Management

13.20 Roles and Responsibilities - IT Service Continuity and Disaster Recovery

IT Service Continuity and Disaster Recovery (DR) Services are the activities associated with providing such Services for ACSA applications, and their associated infrastructure (e.g., CPU, servers, network, data and output devices, End-User devices) and for ACSA Voice Network Services. ACSA applications, associated infrastructure and Voice Network Services will receive DR Services according to ACSA's Business Continuity Plan. The provider must demonstrate that it will consistently meet or exceed ACSA's IT Service Continuity and DR Services requirements.

Sub area	Number	Task/Activity	provider	ACSA
IT Service Continuity and Disaster Recovery	1.	As needed, assist ACSA in other IT continuity and emergency management activities	R, A	I
	2.	Develop and maintain a detailed DR plan to meet IT Service Continuity and DR requirements. Include plans for data, replication, backups, storage management and contingency operations that provide for recovering ACSA's systems within established recovery requirement time frames after a disaster affects ACSA's use of the Services.	R, A	I
	3.	Participate in DR tests	R, A	I,C,S
	4.	Track and report DR test results to ACSA	R, A	I
	5.	Review and approve DR testing results	I	R, A

Table 34 - Roles and Responsibilities - IT Service Continuity and Disaster Recovery

13.21 Roles and Responsibilities - Service-Level Monitoring and Reporting

Service-Level Monitoring and Reporting Services are the activities associated with the monitoring and reporting of Service Levels with respect to Service-Level Requirements (SLRs). In addition, the provider shall report system management information (e.g., performance metrics and system accounting information) to the designated ACSA representatives in a format agreed to by ACSA.

Sub area	Number	Task/Activity	provider	ACSA
Service-Level Monitoring and Reporting	1.	Define Service-Level requirements	I	R, A
	2.	Define Service-Level Monitoring and Reporting requirements	I	R, A
	3.	Develop, document and maintain in the Standards Process and Procedures Manual Service-Level Monitoring and Reporting procedures that meet requirements and adhere to defined policies	R, A	I
	4.	Review and approve Service-Level Monitoring and Reporting procedures	C	R, A
	5.	Report on SLR performance and improvement results	R, A	I
	6.	Coordinate SLR monitoring and reporting with the designated ACSA representative and Third Parties	R, A	I
	7.	Measure, analyse and provide management reports on performance relative to SLRs	R, A	I
	8.	Conduct SLR Improvement Meetings to review SLRs and recommendations for improvements	R, A	I
	9.	Review and approve SLR improvement plans	I	R, A
	10.	Implement SLR improvement plans	R, A	I
	11.	Review and approve SLR metrics and performance reports	C, I	R, A
	12.	Provide ACSA access to the performance and SLR reporting, and monitoring system and data	R, A	I

Table 35 - Roles and Responsibilities - Service-Level Monitoring and Reporting

13.22 Roles and Responsibilities - Financial Management

Manage the financial aspects of the contract. This involves reconciling of billing and internal chargeback. This also includes Processes for maintaining financial management of the contract through unnecessary cost elimination

Sub area	Number	Task/Activity	provider	ACSA
Financial Management	1.	Adhere to ACSA Standards and Procedures Manual Financial/Chargeback Management and Invoicing procedures.	R, A	I
	2.	Implement corrective actions for billing disparities	R, A	I
	3.	Provide data to conduct Penalties per ACSA requirements	R, A	I
	4.	Provide timely and correct invoices to ACSA and/or respective ACSA Operating Divisions	R, A	I
	5.	Provide ACSA Standards and Procedures Manual Financial/Chargeback Management and Invoicing procedures.	I	R, A
	6.	Provide such information as it may reasonably request for it to perform Penalty processes	I	R, A
	7.	Identify billing disparities and work with the provider to identify corrective actions	I	R, A
	8.	provide information to be used for budgeting in line with operating plan	R, A	I
	9.	Assist in monitoring and manage charging/invoicing	R, A	I
	10.	Set budgets in line with operating plan		R, A
	11.	Monitor and manage payment against budgets		R, A

Sub area	Number	Task/Activity	provider	ACSA
	12.	Maintain an audit trail and records of all costs incurred under the Agreement	R, A	I
	13.	Proactively ensure that all unnecessary costs are eliminated, and that costs are managed in an efficient manner	R, A	I
	14.	Participate in financial review meetings	R, A	I
	15.	Identify areas for potential cost savings and provide input for the innovation process where appropriate	R, A	I
	16.	Implement ACSA's invoicing and recharge requirements	R, A	I
	17.	Review and approve records of all costs incurred by the provider under the Agreement	I	R, A
	18.	Proactively ensure that all unnecessary costs are eliminated, and that costs are managed in an efficient manner	I	R, A
	19.	Participate in financial review meetings	I	R, A
	20.	Identify areas for potential cost savings and provide input for the innovation process where appropriate	I	R, A
	21.	Implement ACSA's invoicing and recharge requirements	I	R, A

Table 36 - Roles and Responsibilities - Financial Management

13.23 Roles and Responsibilities - Human Resources

Human Resource Management Services include the activities associated with the provision and adjustment of appropriate human resources, per workloads, to perform the required Services at the required Service Levels

Sub area	Number	Task/Activity	provider	ACSA
Skills and Staffing	1.	Ensure that staffing and skill levels are adequate to achieve SLA	R, A	I
	2.	Train and up skill staff as required	R, A	I
	3.	Provide ACSA with staff training plans (especially onsite staff)	R, A	I
	4.	Monitor the staff development	I	R, A
Capacity Management	5.	Proactively keep the provider informed of any requirements that would potentially impact on the Service provider's HR resource requirements	I	R, A
	6.	Define any constraints for the use of Subcontractors	I	R, A
	7.	Approve or reject recommended Subcontractors	I	R, A
	8.	Analyse the impact of any new requests made by ACSA to be implemented by the provider and propose HR resources (skills and staffing) solution	R, A	I
	9.	Analyse the impact of enhanced SLAs (if required by ACSA) on the allocated human resources and propose solution	R, A	I
	10.	Recruit and provide the human resources necessary for the performance of required Services in compliance with SLAs	R, A	I
	11.	Manage Employees time off and replacement	R, A	I
	12.	Recommend Subcontractors for delivery of Services, if applicable	R, A	I
Performance	13.	Continuously monitor the performance of all the human resources made available to ACSA to ensure that the Services comply with the SLAs	R, A	I

Sub area	Number	Task/Activity	provider	ACSA
	14.	Perform Annual Employee performance reviews	R, A	I
	15.	Consider ACSA satisfaction a key component of the assigned Employee performance reviews	R, A	I
Change Management	16.	On request by ACSA designate certain members of staff as Key Employees	R, A	I
	17.	Inform ACSA with a minimum of two weeks' notice of any potential Key Employee staffing changes and of any new Employee assignments planned for new projects and Services	R, A	I
	18.	Assign a new provider Relationship Manager as necessary to discharge the Service provider's responsibilities	R, A	I
	19.	Provide staff turnover data relevant to the Agreement when requested by ACSA	R, A	I
	20.	ACSA to nominate key employees where required	I	R, A
	21.	Request provider staff turnover data when required	I	R, A
	22.	Communicate changes to internal ACSA Stakeholders	I	R, A

Table 37 - Roles and Responsibilities - Human Resources

13.24 **Roles and Responsibilities - Security**

Security Services are the activities associated with maintaining physical and logical security of all Service components (hardware and software) and data, virus protection, access protection and other Security Services in compliance with ACSA's Security requirements.

Physical Security focuses on the physical access controls implemented to ensure the security of ACSA's and providers' data processing equipment, facilities and its associated management systems

Data Security consists of the activities associated with the classification, management, security and encryption of sensitive/confidential data, and the storage of media containing that data.

Identity and Access Management Services consist of the activities to authorize, authenticate and provide access control to the IT Infrastructure

Sub area	Number	Task/Activity	provider	ACSA
General	1.	Install Security patches per ACSA's Change Management process and procedures, including acquiring required ACSA approval	R, A	I
Physical Security	2.	Provide physical security in conformance with policies, procedures and practices	R, A	I
	3.	Physically secure data processing equipment, facilities and storage media from unauthorized access	R, A	I
	4.	Physically protect and store fixed and portable media (e.g., tape, optical, portable hard drives, flash drives) containing sensitive data	R, A	I
	5.	Ensure only authorised personnel have access to data processing equipment, facilities and storage media	R, A	I
	6.	Track and monitor all physical access and activities performed on data processing equipment and facilities	R, A	I
	7.	Review logs to show that the access to data processing equipment was business-justified	R, A	I

Sub area	Number	Task/Activity	provider	ACSA
	8.	Provide the capability to immediately revoke access to data processing equipment, facilities and storage media	R, A	I
	9.	Maintain physical access audit logs	R, A	I
	10.	Physically secure management systems from unauthorised access	R, A	I
	11.	Ensure only authorised personnel have access to management systems	R, A	I
	12.	Track and monitor all changes performed on management systems	R, A	I
	13.	Provide the capability to immediately revoke access from management systems	R, A	I
	14.	Maintain change audit logs on management systems	R, A	I
Data Security	15.	Assume custodial responsibility for all storage media related to services provided	R, A	I
	16.	Protect portable media while in transit and maintain transmittal records	R, A	I
	17.	Eradicate all data from storage media (server memory, disk, tape, optical, other) before redeployment or disposal, in accordance with ACSA's procedures	R, A	I
	18.	Perform periodic (e.g., monthly) reconciliation reporting of all data media and perform an annual audit to reconcile all storage media	R, A	I
	19.	Report reconciliation discrepancies to ACSA and take corrective action to address the issue	R, A	I
Identity and Access Management	20.	Provide Identity and Access Management in conformance with ACSA practices, policies and procedures	R, A	I
	21.	Establish roles, authorised activities and minimum rights granted to Service provider personnel (including non-user accounts)	R, A	I
	22.	Establish roles, authorized activities and minimum rights granted to ACSA personnel (including non-user accounts)	I	R, A
	23.	Approve roles and authorization activities performed by provider	I	R, A
	24.	Establish and manage the process for defining, granting, modifying and revoking user accounts and enforcing role restrictions	R, A	I
	25.	Establish and manage process to support temporary access	R, A	I
	26.	Review and approve user and system user account management process	I	R, A
	27.	Approve Service provider personnel who are authorized to manage user accounts	I	R, A
	28.	Provide IT Identity and Access Management technology solution that integrates with ACSA systems	I	R, A
	29.	Support and maintain IT Identity and Access Management technology solution for infrastructure	R, A	I
	30.	Perform engineering, configuration and ongoing management of IT Identity and Access Management technology solution	R, A	I
	31.	Provide and implement a solution to interface ACSA and Service provider's Identity and Access Management processes	R, A	I
	32.	Approve solution to interface ACSA and Service provider's Identity and Access Management processes	I	R, A
	33.	Define logging and archiving policies and requirements	I	R, A
	34.	Provide logging and archiving specifications/design	R, A	I
	35.	Approve logging and archiving specification/design	I	R, A
	36.	Log and archive user/account activity according to approved logging and archiving specification/design	R, A	I

Sub area	Number	Task/Activity	provider	ACSA
	37.	Monthly audit production system access logs and activities to identify malicious or abnormal behaviour in accordance with established ACSA policies and standards	R, A	I
	38.	Conduct a monthly review of all privileged user accounts to ensure the accounts are valid/required, removing inactive and unneeded accounts in accordance with established ACSA policies and standards	R, A	I
	39.	Conduct a monthly review of End-User accounts to ensure each user has the appropriate minimal permissions required to perform their job function in accordance with established ACSA policies and standards	R, A	I
	40.	Conduct a monthly review of privileged user accounts to ensure each user has appropriate minimal permissions required to perform their job function in accordance with established ACSA policies and standards	R, A	I
Security Configuration Management	41.	Certify the engineering and Configuration Management are secure	R, A	I
	42.	Review and approve engineering designs and Configuration Management security	I	R, A
	43.	Certify equipment meets ACSA's security requirements and provide evidence of compliance	R, A	I
	44.	Periodically review equipment configurations and address any deficiencies or inconsistencies, and provide ACSA with the results with detailed recommendations to remediate issues that are found	R, A	I
	45.	Review and approve the remediation approach	I	R, A
	46.	Provide ACSA with secure baselines for standard components (e.g., routers, servers, DBMS, etc.)	R, A	I
	47.	Establish a baseline for the secure configuration of Equipment based on ACSA's technical control specifications (e.g., CIS benchmark)	I	R, A
	48.	Recommend changes to baseline to meet ACSA requirements	I	R, A
	49.	Configure equipment to approved security requirements	R, A	I
	50.	provider collaborates with ACSA on plan to implement security patches. This is something	R, A	I
	51.	Install security patches per the Change, Configuration and Release Management processes and procedures	R, A	I
	52.	Establish logging and archiving specifications	R, A	I
	53.	Identify logging and archiving specifications in order to support business requirements	I	R, A
	54.	Approve logging and archiving specifications.	I	R, A
	55.	Log and archive user and system activity.	R, A	I
	56.	Provide ACSA with reports on any server logs/intrusion detection activities, anomalies or deficiencies that could result in a compromise of the ecommerce system's data confidentially, integrity or system performance	R, A	I
	57.	Provide ongoing support (patches, upgrades, signatures), tuning and management	R, A	I

Table 38 - Roles and Responsibilities - Security

14.0 SERVICE MANAGEMENT

14.1 Objectives

14.1.1 A key objective of this Managed Service agreement is to attain SLRs.

14.1.2 SLRs applicable are identified in this Service Management SOW below.

14.1.3 Specific Service Management SLRs are specified with Fee Reductions, where business is impacted through failure to meet their respective SLRs. SLRs are detailed in the Service-Level Requirements section, and those associated with Fee Reductions are identified in 15.0 SERVICE CREDITS.

14.1.4 Provider shall provide written reports to Technical Operations Manager regarding provider's compliance with the SLRs specified.

14.2 Reports

14.2.1 The provider shall report to ACSA its performance of the Services against each SLA monthly beginning on the Effective Date, along with detailed supporting information. As part of the standard monthly Service Level reports, the provider shall notify ACSA of any (i) Service Level Failures, and (ii) Penalties to which ACSA becomes entitled.

14.2.2 The provider shall provide such reports and supporting information to ACSA no later than 5 (five) Business Days following the end of the applicable Measurement Interval. The raw data and detailed supporting information shall be Confidential Information of ACSA.

14.3 Root cause analysis

14.3.1 The provider shall promptly investigate and correct Service Level Failures in accordance with the procedures for Root Cause Analysis

14.4 Support services

14.4.1 This refers to day to day support activities performed to resolve incidents that are logged by users of the system or logged by the monitoring tools or alarm and error logs generated by the system’s internal monitoring.

14.4.2 The provider will be required to attend to and resolve all incidents in line with ACSA incident management processes.

14.4.3 The response and resolution times depicted below must be adhered to. This will form part of the SLAs that will be agreed to between The provider and ACSA.

14.4.4 Penalties will be incurred by the provider if the agreed SLA times are not met.

14.4.5 A good performance on an SLA cannot compensate a bad performance on another one

14.4.6 The fact that an SLA is not associated with a specific service does not mean that this SLA is not important to ACSA.

14.5 SERVICE-LEVEL REQUIREMENTS (SLRs)

The following Service-Level Requirements (SLRs) represent minimum Service levels required. providers must consistently meet or exceed the following SLRs.

14.5.1 Review of Service Levels and KPIS

On an Annual basis after the initial start-up (90 days), ACSA can request a change to any service level by providing notice to the provider that a service level needs to be changed.

This change can take effect only after the provider has had sufficient time (maximum 3 weeks) to review the requested change and determine if any modifications are required to the delivery of the support and maintenance services. Should changes be required by the provider, then ACSA must allow the provider reasonable time to make such changes before the service-level change takes place.

14.5.2 Priority levels

Priority Level 1 — Emergency/Urgent *Critical Business Impact*	The incident has caused a complete and immediate work stoppage affecting a critical function or critical infrastructure component, and a primary business process or a broad group of users (an entire department, floor, branch, line of business or external customer). No workaround available. Examples: • Maximum temperature threshold is reached and exceeded in Data Centre / Core Room • Damage to both A & B fibre backbone between wire centres and Core Room / Data Centre resulting in complete loss of connectivity
Priority Level 2 — High *Major Business Impact*	A business process is affected in such a way that business functions are severely degraded, multiple users are impacted, a key customer is affected, or a critical function is operating a significantly reduced capacity or functionality. A workaround may be available but is not easily sustainable. Examples: • Half of the HVAC units fail, and Data Centre / Core Room is running on one source of HVAC only – therefore no failover / complete solution • Damage to either A or B fibre backbone between wire centres and Core Room / Data Centre resulting in no alternative network routes during this damage
Priority Level 3 — Medium *Moderate Business Impact*	A business process is affected in such a way that certain functions are unavailable to End Users or a system and/or service is degraded. A workaround may be available. Examples: • HVAC condenser A failure • Fibre uplink failure between switch and Core network switch
Priority Level 4 — Low *Minimal Business Impact*	An incident that has little impact on normal business processes and can be handled on a scheduled basis. A workaround is available or there is minimal negative impact on a user's ability to perform their normal daily work. Example: • Loss of communication between monitoring and HVAC • Network point failure on redundant system with no operational impact
Priority Level 5 — Low Impact that will take a week or two to resolve	Any services or equipment that has a low impact that will require a week or two to fix

Table 39 – Priority Levels

14.5.3 Incident management

14.5.3.1 Time to resolve incidents/problems following responses to different incident priority level classifications.

14.5.3.2 Each IT Service categorises incidents/problems according to the incident/problem resolution priorities listed below.

Incident management response and resolution times for International Airports (Operational Hours)			
Incident/Problem Resolution	**Service Measure**	**Performance Target**	**SLR Performance %**
Time to Notify ACSA of or to accept/acknowledgement of a Priority 1	Time to Respond	<10 minutes	99.0%
Time to Notify ACSA of or to accept/acknowledgement of a Priority 2 Incident	Time to Respond	<20 minutes	99.0%
Time to Notify ACSA of or to accept/acknowledgement of a Priority 3 or 4 Incident	Time to Respond	<120 minutes	98.0%
Time to Notify ACSA of or to accept/acknowledgement of a Priority 5 Incident	Time to Respond	<3 hours	98.0%
Priority Level 1	Time to Restore (temporary or permanent restoration)	<2 hours	99.0%
Priority Level 2	Time to Restore (temporary or permanent restoration)	<4 hours	98.0%
Priority Level 3	Time to Restore (temporary or permanent restoration)	<8 hours	98.0%
Priority Level 4	Time to Restore (temporary or permanent restoration)	Next business day	98.0%
Priority Level 5	Time to Restore (temporary or permanent restoration)	Next business day or as agreed	98.0%
Priority Level 1	Resolution (permanent fix)	Next business day or as agreed if next business day is not possible due to fix required	99.0%
Priority Level 2	Resolution (permanent fix)	Next business day or as agreed if next business day is not possible due to fix required	99.0%
Priority Level 3	Resolution (permanent fix)	To be agreed	98.0%
Priority Level 4	Resolution (permanent fix)	To be agreed	98.0%
Priority Level 5	Resolution (permanent fix)	To be agreed	98.0%
Priority Level1-5 Hardware Failure	Fix/replacement	In line with the hardware support procured by ASCA	99.0%
Root-Cause Analysis	Time to Report	Within 48 hours of incident resolution	98.0%
	Formula	Number of requests completed within Performance Target ÷ Total of all requests occurring during Measurement Interval	
	Measurement Interval	Weekly	
	Reporting Period	Monthly	
	Measurement Tool	Data from ACSA Service management Tool (Service NOW) complimented with other provider tools if applicable	
	SLR Element Weighting Factor Allocation	50%	

Table 40 - Incident Response and Resolution time (Office Hours)

Incident management response and resolution times for International Airports (after-hours) and regional airports.			
Incident/Problem Resolution	**Service Measure**	**Performance Target**	**SLR Performance %**
Time to Notify ACSA of or to accept/acknowledgement of a Priority 1	Time to Respond	<15 minutes	99.0%
Time to Notify ACSA of or to accept/acknowledgement of a Priority 2 Incident	Time to Respond	<20 minutes	99.0%
Time to Notify ACSA of or to accept/acknowledgement of a Priority 3 or 4 Incident	Time to Respond	<2 hours	98.0%
Time to Notify ACSA of or to accept/acknowledgement of a Priority 5 Incident	Time to Respond	<3 hours	98.0%
Priority Level 1	Time to Restore (Not linked to hardware failure)	<3 hours	99.0%
Priority Level 2	Time to Restore (Not linked to hardware failure)	<5 hours	98.0%
Priority Level 3	Time to Restore (Not linked to hardware failure)	<10 hours	98.0%
Priority Level 4	Time to Restore (Not linked to hardware failure)	Next business day or as prioritised by the provider	98.0%
Priority Level 5	Time to Restore (Not linked to hardware failure)	To be agreed	98.0%
Priority Level 1	Resolution (permanent fix)	To be agreed	99.0%
Priority Level 2	Resolution (permanent fix)	To be agreed	99.0%
Priority Level 3	Resolution (permanent fix)	To be agreed	98.0%
Priority Level 4	Resolution (permanent fix)	To be agreed	98.0%
Priority Level 5	Resolution (permanent fix)	To be agreed	98.0%
Priority Level1-5 Hardware Failure	Fix/replacement	In line with the hardware support procured by ASCA	99.0%
Root-Cause Analysis	Time to Report	Within 48 hours of incident resolution	98.0%
	Formula	Number of requests completed within Performance Target ÷ Total of all requests occurring during Measurement Interval	
	Measurement Interval	Weekly	
	Reporting Period	Monthly	
	Measurement Tool	Data from the ACSA Service Management Tool (Service NOW) complemented with other provider tools if applicable	
	SLR Element Weighting Factor Allocation	50%	

Table 41 - Incident Response and Resolution time (After Hours) (and Regional airports)

14.5.4 Resource Availability

Resource Availability SLR	
Component	**Explanation of Component**
Definition	Based on the availability of minimum specified Resources.
Coverage	As per resource table
Measurement Range	98%
Frequency	Monthly
Measurement Tool	Provider Automated Time and attendance tool
Calculation Formula	Performance is calculated as follows: DI = Total "downtime" hours AI = Adjusted downtime hours based on exceptions H = Hours in the month (adjusted according to resource type and availability requirements) OI = Total number of resources per type EI = Expected availability = H x OI Report Only: **Availability %** = (EI — DI)/EI x 100 SLA: **Adjusted Availability** % = (EI — AI)/EI x 100
SLR Element Weighting Factor Allocation	30%

Table 42 Resource availability SLR

14.5.5 Service requests

System Administration Service-Level Requirements			
System Administration Task	**Service Measure**	**Performance Target**	**SLR Performance %**
New network point scope and quote	Elapsed Time	Within 8 hours (in business hours)	98.0%
New network point installation	Elapsed Time	Within 8 hours from quote approval (in business hours)	98.0%
Cable neatening in offices	Elapsed Time	Within 48 hours (in business hours)	98.0%
Testing of network point	Elapsed Time	Within 8 hours (in business hours)	98.0%
Cleaning of fibre	Elapsed Time	Within 24 hours (in business hours)	98.0%
Cable tracing	Elapsed Time	Within 48 hours (in business hours)	98.0%
Mounting of devices in core room and wire centres.	Elapsed Time	Within 48 hours (in business hours)	98.0%
Provide access to Infrastructure rooms	Elapsed Time	Within 24 hours (in business hours)	98.0%
Escorting Vendors	Elapsed Time	Within 48 hours (in business hours)	98.0%
Supervised access for changes	Elapsed Time	Within 48 hours (in business hours)	98.0%
	Formula	Number of requests completed within Performance Target ÷ Total of all requests occurring during Measurement Interval	
	Measurement Interval	Measure Weekly	
	Reporting Period	Report Monthly	
	Measurement Tool	Service Now Reports	

Table 43 Service requests SLR

14.5.6 IMACDs

14.5.6.1 Any physical installation, dismantlement, relocation of hardware, and any hardware or software installation, upgrade, or update in accordance with Change Management policies. IMACDs are usually planned and scheduled in advance.

14.5.6.2 Should The provider not be able to fulfil the IMACD requirement, in the required timeline The provider must provide ACSA with a proposal stating the committed time to complete the IMACD. ACSA, has based on their sole discretion, the right to accept the proposal or engage an alternative (internal or external) provider to provide the service.

14.5.6.3 Once the final quote and BOM materials has been submitted to, and approved by ACSA, and a purchase order has been provided to the provider, no variance orders will be approved, unless ACSA request additional scope requirements to the Project or IMACD, the provider will deliver the project or IMACD request as per the approved quote and according the approved scope document

Service Measure:	Performance Target:	SLR Performance %
Service measure 1: Submission of quote, BOM and Scope document to ACSA	Receipt of quote, BOM and scope document 5 working days after request from ACSA, unless provider advise in	

	writing within 24 hours of IMACD / Project request that an extension is required	
Service Measure 2: Project delivery according to baselined project schedule	Project to be delivered on time, or ahead of schedule as defined in the project schedule. Should there be any delays to the delivery, a meeting is to be scheduled with ACSA for approval to re-baseline the project timelines.	100%
Service Measure 3: Project governance and documentation	Project to be delivered according to ACSA project methodology Project documentation adherence Documentation accuracy Project meeting & reporting adherence	100%
On receipt of approval to proceed with IMACD, The provider is to complete the IMACD on time as per the approved plan	Each IMACD milestones not delivered on time as per the approved IMACD plan – if not formally re-baselined and approved by ACSA will be deemed a missed SLA	100%
Missing any of the above performance targets will be deemed as an SLA failure ACSA Program Manager will escalate SLA failure to the Provider Account Manager to action • SLA failure of service measure 1 & 3: 3 or more SLA failures will raise SLA failure – 5% of the project cost will be deducted from the final project payment • After 3 SLA failures on service measure 1 & 3 an escalation to the IT Sourcing Manager / ACSA contract manager to formally record breach of delivery • SLA failure of service measure 2: Final project delivery date missed per the baselined project schedule will raise SLA failure – 15% of the project cost will be deducted from the final project payment		
	SLR Element Weighting Factor Allocation	30%

Table 44 IMACD SLR

14.5.7 Asset management

14.5.7.1 Within five days after the first day of each calendar quarter, the provider shall select a statistically valid sample, in accordance with the agreed process, to measure the provider's compliance with the following SLRs pertaining to the accuracy of individual data elements in the asset tracking database. Accuracy of data shall adhere to the following SLR.

14.5.7.2 Historic information may not be available, and exclusion of certain data elements will be granted at the discretion of ACSA

Asset Tracking SLR			
	Service Measure	**Performance Target**	**SLR Performance %**
Accuracy of Data in Asset Tracking Database	Accuracy	Accuracy percentage of each of the following data elements as determined by audit:	
		Data Element	**Accuracy Percentage**
		ACSA asset tag number, Serial Number, Model number, PO number, Invoice number	99%
		Location (Wirecenter, position in Cabinet, Room tag number, Site)	99%
	Formula	Number of tracked assets where data element is determined to be correct ÷ Total number of tracked assets audited	
	Measurement Interval	quarterly as of the Effective Date	
	Measurement Tool	Physical Audit.	
	SLR Element Weighting Factor Allocation	30%	

Table 45 Asset Tracking SLR

14.5.8 Configuration management

14.5.8.1 Configuration Management Services are the activities associated with providing a logical model of the infrastructure service by identifying, controlling, maintaining and verifying installed hardware, software and utility versions.

14.5.8.2 Within five (5) days after the first day of each calendar quarter, the provider shall select a statistically valid sample for assessment and SLA review.

Configuration Management SLR	
Service Measure:	**Performance Target:**
Configuration Record Accuracy: Data accuracy – chosen sample of all configuration (hardware and software) tracked by the ACSA CMDB tools	98%
Timelines of updates: Time to update configuration records	1 day after change to configuration
Measurement Interval:	Electronic audit, conducted quarterly from date of contract commencement
Measurement Tool:	ACSA CMDB Tools (DCIM)
SLR Element Weighting Factor Allocation	20%

Table 46 Configuration Management SLR

14.5.9 Overall service satisfaction

14.5.9.1 Where the provider receives feedback through client surveys and end user feedback, where satisfaction is measured on a scale of 1 to 5, with 1 being lowest and 5 being highest.

End-User Satisfaction SLR			
End-User Satisfaction	**Service Measure**	**Performance Target**	**SLR Performance %**
Scheduled Survey (conducted semi-annually by ACSA or its designated Third-Party agent)	End-User Satisfaction rate	clients surveyed should be very satisfied or satisfied	90%
	Formula	Sum of survey results from each participant ÷ Total number of participants responding to the scheduled survey	
	Measurement Interval	Quarterly	
	Reporting Period	Quarterly	
	Measurement Method/Source Data	ACSA Service Management Tool, or results from a special survey	
	SLR Element Weighting Factor Allocation	5%	

Table 47 Overall satisfaction SLR

14.5.10 Software/Firmware Refresh

Software refresh for all upgrades and new releases.

Software /firmware Refresh Service-Level Requirements			
Software Refresh	**Service Measure**	**Performance Target**	**SLR Performance %**
Notification of vendor Software upgrades and new releases	Response Time	Within 30 days after Software vendor announcement	95.0%
Implementation of service packs and updates to "dot" releases	Response Time	Within 60 days after approved by Client	95.0%
Implementation of version or major release updates	Response Time	Within 120 days after approved by Client	95.0%
	Formula	Number of requests completed on time ÷ Total of all requests occurring during Measurement period	
	Measure Interval	Measure Monthly	
	Reporting Period	Report Monthly	
	Measurement Tool	Structureware – Data Centre Operations (DCO) Structureware – Data Centre Expert(DCE)	
	SLR Element Weighting Factor Allocation	5%	

Table 48 Software/Firmware Refresh SLR

14.5.11 Service level agreement measurement exclusions

The following table provides a list of events that should they occur will not impact on the measurement of the Service Level Agreements.

Number	Service Level Measurement Exclusions
1.	The connection of ancillary equipment, not supplied by the Service provider, or not approved by the manufacturer of the equipment and software;
2.	The negligent use, abuse or misuse of equipment and software by ACSA;
3.	Damage during any transportation of equipment and software by ACSA;
4.	Electrical work, not performed by the Service provider;
5.	Causes external to the equipment such as failure or proven fluctuation of electrical power;
6.	Any authorised/unauthorised changes not communicated to the Service provider
7.	Failure of equipment or services not directly under the control of, or within the responsibility of the Service provider.

Table 49 SLA Measurement Exclusions

15.0 SERVICE CREDITS

The Service Credit Methodology aims to be an appropriate and adequate remedy for non-performance by the Service provider. The philosophy of the Service Credit Methodology is such that it should drive positive behaviour by encouraging compliance with the Service Level Requirements (SLRs) and be consistent with the outcomes required by ACSA. The Service Credit Methodology has been designed recognizing this philosophy and also incorporates:

- the need to match Service Credit payments to the severity of the failure/defect.
- the need to provide appropriate incentives based on regimes to cure any defect or failure as quickly as possible.
- the need to avoid an inappropriate impact on Service provider funding.
- the need to be easily understood and unambiguous.
- the need to be administratively manageable.
- the need to avoid consistent non-performance.

15.1 **Principles**

The principles for the calculation of the credits are described below:

15.1.1 Service Credits only occur as a result of Service Level Failures.

15.1.2 The Service Levels are calculated for each SLR according to the measurement interval specified in each SLR table (monthly by default),

15.1.3 The Service Credits are calculated according to the formula associated with the SLR as specified in each SLR table.

15.1.4 The Service Credits are totalled for each SLR and valued using the contractual value of a Service Credit.

15.1.5 A good performance on a SLR cannot compensate a bad performance on another one

15.1.6 The SLRs that are considered as critical by ACSA will always be associated with Service Credits assigned. The other set of SLRs can be subject to Service Credits mechanisms, if they are included in a quality improvement plan, or if the Service Levels attained are periodically below requirements.

15.1.7 The fact that an SLR is not associated with a Service Credit does not mean that this SLR is not important to ACSA.

15.1.8 ACSA reserves the right to associate Services Credit mechanism to SLRs where the Service provider would have been in failure over several consecutive months.

15.1.9 ACSA reserves the right to not apply some or any Service Credits that may occur at its sole discretion.

15.1.10 The provider will be allowed a grace period of three ninety (90) Days (to familiarise itself with the operations at all airports) before the implementation of service credits will commence. SLA's will be measured and reported on during the grace period; however, no credits will apply

15.2 **Definitions**

15.2.1 **Total Per Site Monthly Fee -** means the monthly service fixed fee per ACSA Site payable by ACSA to the Service provider for the Services.

15.2.2 **At Risk Amount -** means, for any month during the Term, fifty per cent (50%) of the monthly fixed Service Fees per ACSA Site.

15.2.3 **Weighting Factor** - means, for a particular Service Level Requirement (SLR), the portion of the At-Risk Amount used to calculate the Service Credit payable to ACSA in the event of a Service Level Failure with respect to that SLR.

15.2.4 **Monthly Service Credit Pool** - means two hundred per cent (200%).

15.2.5 **Service Level Failure(s)** - means whenever the Service provider's actual level of performance for a particular Service Level metric (as calculated by that particular metric's service level calculation) is worse than the Target Performance adjusted by the Minimum Performance Percentage (%) for that Service Level.

15.2.6 **Service Credit** - means a calculated value based on the percentages in Weighting of Monthly Service Credit Pool in Section 3 of this document.

15.2.7 **Service Level Requirement Categories** – SLRs are allocated against the following categories:

15.2.7.1 **Primary Category:** Has a direct impact on ACSA business. Service Credits will be applied.

15.2.7.2 **Secondary Category:** Has some direct impact on ACSA business; no service credits apply to these SLRs, which have a Weighting Factor of zero per cent (0%).

15.3 **Methodology**

15.3.1 **Monitoring; reports; root cause analysis.**

15.3.1.1 **Monitoring**

The Service provider shall utilise ACSA measurement and monitoring tools and produce the metrics and reports necessary to measure its performance against the Service Levels.

Additional Tools may be implemented by the provider at its own costs should the ACSA tools not be enough.

Upon request and at no additional charge to ACSA, Service provider shall provide ACSA or its designees with information and access to the tools and procedures used to produce such metrics.

15.3.1.2 **Reports**

The Service provider shall report to ACSA its performance of the Services against each SLR on a monthly basis beginning on the Effective Date, along with detailed supporting information. As part of the standard monthly Service Level reports, the Service provider shall notify ACSA of any

(i) Service Level Failures, and

(ii) (ii) Service Credits to which ACSA becomes entitled.

The Service provider shall provide such reports and supporting information to ACSA no later than 5 (five) Business Days following the end of the applicable Measurement Interval. The raw data and detailed supporting information shall be Confidential Information of ACSA.

15.3.1.3 **Root cause analysis**

The Service provider shall promptly investigate and correct Service Level Failures in accordance with the procedures for Root Cause Analysis outlined in the Agreement.

15.3.2 **Calculating service credits**

For each Primary Service Level Failure, the Service provider shall pay or credit to ACSA a Service Credit that will be computed by multiplying (a) the Weighting Factor Allocation for such Service Level by (b) the At Risk Amount.

For example, assume for purposes of illustration only, that the Service provider fails to meet a Service Level with a Weighting Factor of 10% (ten per cent) and that the monthly Fees equal R100,000 (one hundred thousand rand) and the At Risk Amount is 20% (twenty per cent). The Service Credit due to ACSA for such Service Level Failure would be: 10% * (20% * R100,000.00) = R2,000.

15.3.3 **Service breach**

If a Service Level Failure recurs **in more than four consecutive** Measurement Intervals, then such Service Level Failure shall constitute a material breach entitling ACSA to the rights set out in the Agreement.

15.3.4 **Several service level failures**

Subject to Section found. If more than one Service Level Failure with respect to Service Levels has occurred in a single month, the sum of the corresponding Service Credits shall be credited or paid to ACSA.

15.3.5 **Successive service level failures**

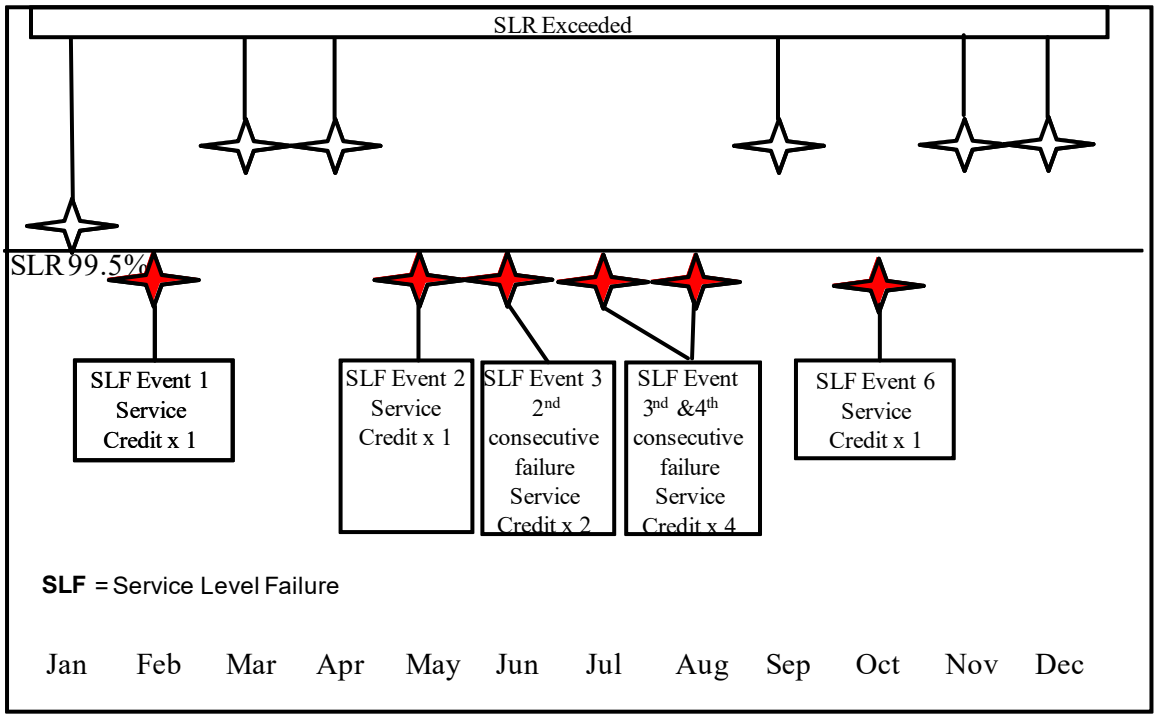
If a Service Level Failure with respect to a given Service Level recurs in consecutive Measurement Intervals, the amount of the applicable Service Credit payable to ACSA shall be multiplied by the following factors for subsequent Measurement Intervals:

(i) Service Level Failure in two consecutive Measurement Intervals, then **twice (x2)** the amount of the Performance Credit as originally calculated; and

(ii) Service Level Failure in three or more consecutive Measurement Intervals, then **four times (x4)** the amount of the Service Credit as originally calculated.

The Service Credit for any given Service Level shall only be increased as described above, and such increase shall be payable for all consecutive Service Level Failures with respect to such Service Level.

Figure 1. Service Credit for Successive Failures Example



15.3.6 **Service credits cap**

In no event shall the aggregate amount of Service Credits credited or paid to ACSA with respect to all Service Level Failures occurring in a single month exceed the At-Risk Amount.

15.3.7 **Payment/credit of service credits**

The Service provider shall itemise the total amount of Service Credits it is obliged to credit to ACSA with respect to Service Level Failures occurring in a given month on the invoice that contains charges for such month. The Service provider shall credit the total amount of such Service Credits related to a given month in the subsequent monthly invoice after ACSA signoff of the Service Credits for the applicable Measurement Interval. Upon termination or expiration of the Term, the Service provider shall pay to ACSA the amount of any Service Credits not so paid or credited to ACSA's account or any unused portion of such Service Credits.

15.3.8 **Non-exclusive remedy**

The Service provider acknowledges and agrees that the Service Credits shall not be deemed or construed to be liquidated damages or a sole and exclusive remedy or in lieu of any other rights and remedies ACSA has under the Agreement, at law or in equity.

15.3.9 **Earn-Back**

Following any service-level failure, ACSA may allow the provider the opportunity to earn back the service credits charged in one or more measurement period.

If all the service levels for the relevant service and any others agreed to be associated with that service are exceeded, during each of the **three** measurement periods following the service-level failure, ACSA may, at its sole discretion, return half of the service credits paid to the provider.

If all the service levels for the relevant service and any others agreed to be associated with that service are exceeded, during each of the **six** measurement periods following the service-level failure, ACSA may, at its sole discretion, return the remaining half of the service credits paid to the provider.

The provider may, where the requisite levels of performance are exceeded, make representations to the Company in this regard.

15.4 Changes to performance measurements

15.4.1 Changes to weighting factors

ACSA may request changes to the Weighting Factors for any Service Level by sending written notice to the Service provider. These requested changes will be negotiated through the appropriate Relationship Management structures to gain mutual agreement on such changes prior to them taking effect during the next full measurement interval pertaining to such changed metrics.

15.4.2 Additions

No more than once quarterly, ACSA may add Service Levels by sending written notice to the Service provider at least 30 (thirty) days before the date that such added Service Levels are to be effective. The target performance levels for such additional Service Levels shall be determined by mutual agreement of the Parties using industry standard measures.

15.4.3 Deletions

ACSA may delete Service Levels by sending written notice to the Service provider at least thirty (30) days before the date that such deletions are to be effective.

16.0 MEETINGS AND REPORT REQUIREMENTS

16.1 The following section defines the meeting and report requirements for all services.

16.1.1 All reports must be submitted as defined in the table below. If reports are not delivered within the stipulated times, ACSA will withhold invoice payment for the month until the reports are submitted

16.1.2 **Project meetings:** Will be held weekly at ACSA and/or on demand for the duration of the project and arranged by the ACSA Project Manager. The meeting will be attended by the Service providers' Project Manager, as well as the ACSA Project Manager. The agenda for the meeting shall include, but not be limited to, project progress, project delays, risks & issues and project financials

16.1.3 **Maintenance and Support Meetings:** These meetings will be held as defined in the table below. ACSA and the provider will ensure the required attendees are present at the meetings for the duration of the contract. The purpose of these meetings is to provide the provider a platform to report on their performance.

Meeting Name and frequency	Participants and roles	Documents to be produced after the meeting by the Service provider
Weekly Service Review	· ACSA-IT Engineer (chair) · provider Senior Site Manager · provider administrator	· Minutes of meeting · Running the Action register for any open actions to be addressed
Weekly Project status update	· ACSA-IT PM(chair) · Technical Operations Manager · Provider Senior Site Manager · Provider Project Manager · provider administrator	· Minutes of meeting · Updated project schedule · Action register for any open actions to be addressed · Risks and Issues register
Monthly Care Review	· Technical Operations Manager (chair) · provider Senior Site Manager · Provider Relationship Manager · provider administrator	· Minutes of meeting · Action register for any open actions to be addressed · Risks and Issues register · Service Credit Report
Quarterly review meeting	· Technical Operations Manager (chair) · provider Senior Site Manager · provider Relationship Manager · provider administrator · Senior Manager IT Infrastructure	· Minutes of meeting · Action register for any open actions to be addressed · Risks and Issues register
Annual review meeting	· Technical Operations Manager (chair) · Senior Manager IT Infrastructure · provider Senior Site Manager · provider Relationship Manager · provider administrator · Senior Manager IT Infrastructure	· Minutes of meeting · Action register for any open actions to be addressed · Risks and Issues register

Table 50 Meetings definitions

Frequency	Report Name	Report Content	Due date	Submit to	Format	Meeting Name and frequency
Daily	Fault Summary	Reported faults summary (resolved and outstanding) Weekly to review previous weeks' reports	Start of business every date	ACSA Technical Lead	Email written report summary with supporting tables.	Weekly Service Review
	Fault Summary escalation	Outstanding faults and notification Weekly to review previous weeks' reports	Start of business every date	ACSA Technical Lead	Email written report summary with supporting tables.	Weekly Service Review
	Re-opened fault summary	Re-opened reported faults Weekly to review previous weeks' reports	Start of business every date	ACSA Technical Lead	Email written report summary with supporting tables.	Weekly Service Review
Weekly	Summary Care Report	Summarised report weekly	COB every Friday	ACSA Technical Lead	Email written report summary with supporting tables.	Weekly Service Review
	Project and IMACD updates	Installations completed, including relocations and projects. Present detailed job cards.	One day before the project status update meeting	ACSA Technical Lead & ACSA Project Manager	Email written report summary with supporting tables.	Weekly Project status update
	Data/wire centre areas of concern	Testing done on data/core/wire centres, highlighting areas of concern Weekly to review previous weeks' reports	3 days before the meeting	Technical Operations Manager	Email written report summary with supporting tables.	Weekly Service Review
Monthly	Consolidated Care Report	Monthly consolidated report · Spares Usage · Calendar month Incidents · Payment · Monthly services deliverables · SLA Report (performance against SLR's) · SLA improvement plan · Service Credits	3 days before the meeting	Technical Operations Manager	Email presentation with attached supporting information	Monthly Care Review
	Preventative maintenance	Schedule of preventative maintenance for the following month for all sites	3 days before meeting	ACSA Technical Lead	Email Excel schedule document	Monthly Care Review
	Asset Data	Asset Register	3 days before monthly account meeting	ACSA Technical Lead	Email Excel document	Monthly Care Review
	Clean up	Room clean-ups, inch before & after pictures/video footage	3 days before monthly account meeting	ACSA Technical Lead	Word/Excel	Monthly Care Review

Frequency	Report Name	Report Content	Due date	Submit to	Format	Meeting Name and frequency
	Data/wire centre areas of concern	Testing done on data/core/wire centres highlighting areas of concern Weekly to review previous weeks' reports	3 days before monthly account meeting	ACSA Technical Lead	Word/Excel	Monthly Care Review
	Certificates of Compliance for electrical installations conducted during the previous month	Certificates of Compliance for electrical installations conducted during the previous month	3 days before monthly account meeting	ACSA Technical Lead	COC plus summary in Excel	Monthly Care Review
Quarterly	Stock levels	BOM register documenting stock levels on hand	3 days before quarterly review	ACSA Technical Lead	Email Excel document	Quarterly review meeting
	Contract appendix review	Review updates to contract appendixes are completed	3 days before Quarterly review meeting	ACSA Technical Lead	Email PDF document	Quarterly review meeting
	Baseline (CMDB) information	Review updates to Baseline CMDB	3 days before Quarterly review meeting	ACSA Technical Lead	Email Excel document	Quarterly review meeting
	Design documents for audit	Design document audit	3 days before Quarterly review meeting	ACSA Technical Lead	Email Word document on ACSA template	Quarterly review meeting
	Transformation	Performance, financial and development report of all transformation partners	3 days before Quarterly review meeting	ACSA Technical Ops manager	Presentation detailing performance and transformation progress, financial report	Quarterly review meeting
Annual	Proposed improvements report	Proposed improvements or enhancement report	3 days before annual review meeting	ACSA Technical Lead	Email Word document	Annual review meeting
	Annual performance SLA report	Consolidation of the previous 12 months SLA performance	3 days before annual review meeting	Technical Operations Manager	Email PDF document	Annual review meeting
	Contract adherence review	Summary of contract requirements and adherence thereof	3 days before annual review meeting	Technical Operations Manager	Email PDF document	Annual review meeting
Per project	• Scope document • BOM • Quote • Baseline project schedules • Risk & issues register	• Sign off pack to be approved before invoice is raised • Signed job card • Asset capitalisation documents • Asset handling documentation • As build document	Per project phase	ACSA Programme Manager	Word/Excel/PDF/MSP	N/A

Frequency	Report Name	Report Content	Due date	Submit to	Format	Meeting Name and frequency
	• Minutes of meeting • Before and during photos • Exception reports • Sign off pack Invoice	• Patching schedules • Before and after photos • Link runner test results per point installed • OTDR test results • Routing diagrams where applicable				

Table 51 Reporting table

17.0 SPECIAL CONDITIONS AND OTHER SERVICES

17.1 The Provider is required to develop and maintain a professional and cordial working relationship with the ACSA Infrastructure and asset management departments (M&E) at all airports in scope.

17.2 ACSA M&E is responsible for the provisioning and maintenance of UPS and essential (generator) and ESKOM power to all IT facilities.

17.3 The Provider will acquire approvals both from ACSA-IT and ACSA-M&E prior to commencement on any new works related to power systems.

17.4 All installations will require signed approval from the M&E Electrical head of department before ASCA IT will accept deliverables.

17.5 All electrical Certificate of Compliance (COC) documentation will be handed over to M&E and a copy must also be provided to ACSA IT Infrastructure Engineer.

17.6 The Provider will submit change controls for the maintenance of the systems and provide resources during maintenance periods to ensure that the infrastructure is fully restored, and all systems are functional after any change/maintenance plan.

17.7 The Providers scope of Services is limited to the Supply, Install, Maintain and Support activities of the Power, Cooling; Fire suppression and Cabling Service Towers in IT facilities.

17.8 After installation, the Provider will immediately handover all manufacturer's / factory warranty information.

17.9 The Provider will be required to submit all documentation, training manuals and drawings on completion of commissioning and decommission activities to the IT Infrastructure department.

17.10 All extended warranties must be transferred via a formal handover process to ACSA IT at the closing date of the contract.

17.11 The Provider may from time to time and as when requested by ACSA in writing be required to facilitate / co-ordinate all extended warranties for any equipment which has been installed by ensuring that the warranty is honoured by the OEM's.

17.12 The Provider may from time to time and as when requested by ACSA in writing escort, advise and assist 3rd parties and vendors on cable route identifications and provide required information as relevant to the 3rd parties duties within the airports precincts.

17.13 The Provider shall supply the tools of the trade required to deliver the required services – tools will be stored and moved around the airports in an appropriate toolbox.

17.14 The Provider shall provide protective clothing and accessories per resource, per site.

17.15 The Provider shall comply with OHSE regulations.

17.16 The Provider will compile a Safety file per site. The safety files are to be approved by ACSA at contract commencement and are to be kept updated by the Provider and approved by ACSA throughout the duration of the contract. It is the responsibility of the Provider to ensure there is at

all times a valid safety file available for inspection at each site. Non-compliance shall result in the Provider not gaining access to the sites in scope

17.17 The Provider will make provision for working at heights - scaffolding/scissor jacks/cherry-pickers will be required at each site requirement on airside and landside. The Provider shall not use ladders at a height of 3 meters or more inside or outside of the airports.

17.18 The Provider will asset tag any new equipment installed as part of this contract. Asset tagging shall be done on instruction from ACSA. The Provider will provide the material and consumables, labour and project management as required for asset tagging. The Provider will complete the ACSA asset register.

17.19 The Provider will require a valid access permit to restricted locations per resource, per site for the duration of the contract. The granting of permits will require security checks to be done and the successful completion of compulsory airside induction training. The cost of the permit and the airside induction training will be for the Provider.

17.20 The Provider will be required to pay rental on office lease from ACSA at any of its airports. The Providers can request the rental information to be provided before the closing of the Tender.

17.21 The Provider will be required to pay parking to ACSA at any of its airports. The provider can request that the current parking costs be provided before the closing of the Tender.

17.22 The services will be required on both landside and airside – airside is also referred to as restricted or sterile areas, and an airside access permit will be required for each airport. The Provider will need to take out compulsory airside insurance and provide proof thereof before the Agreement can be signed and before Service may commence. The insurance details will be provided to Providers before closing of the Tender.

17.23 The Provider will conduct an exhaustive inventory and status audit of all IT facilities power and cooling systems, and provide a comprehensive audit report within sixty (60) days of the contract commencement date. This will be accompanied with a status report presentation to ACSA IT. All future activities and improvements will be measured against these audited results; and

17.24 The Provider will produce updated architecture diagrams, which will be reviewed monthly in the CARE meeting, detailing changes to the environment (installations, decommissions; moves).

17.25 The Provider shall ensure that any installations deemed to be of a fixed asset nature (i.e. Cable ways; conduits PVC; galvanised & steel inclusive of wall mounted brackets; DB board; Data & Electrical cabling; trenching) need to be installed by an appropriate Construction Industry Development Board (CIDB) registered contractor. Proof of CIDB registration, meeting the specified CIDB grading for the installation work may be requested at any time by ACSA.