AIRPORTS COMPANY
SOUTH AFRICA

COMMON USE PASSENGER PROCESSING SYSTEMS (CUPPS)

&

COMMON USE SELF-SERVICE (CUSS) KIOSKS

SCOPE OF WORK

(Annexure A)

Glossary and Abbreviations

Item	Description
ACSA	Airports Company South Africa
AEA	Association of European Airlines
OM	Operations Management
API	Application Programming Interface
CUPPS	Common Use Passenger Processing Systems
CUTE	Common User Terminal Equipment
CUSS	Common Use Self Service
CTIA	Cape Town International Airport
KSIA	King Shaka International Airport
EIA	Environmental Impact Assessment
FIDS	Flight Information Display System
ORTIA	Oliver Tambo International Airport
LDCS	Local Departures Control Systems
LED	Light Emitting Diode
MRZ	Machine Readable Zone
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
IEC	International Electrotechnical Commission
ISO	International Organisation for Standardisation
OHS	Occupational Health & Safety
SA	South Africa
SOW	Scope of Work
UPS	Uninterruptible Power Supply.
USB	Universal Serial Bus
VDU	Video Display Unit

CONTENTS

TABLES

1 INTRODUCTION

1.1 Purpose

Airports Company South Africa SOC Ltd (ACSA) invites proposals for the upgrade, support, and maintenance of the existing Common Use Passenger Processing System (CUPPS) and Common Use Self Service (CUSS) equipment at all its airports. By responding to this proposal, bidders agree to meet, at a minimum, the required business requirements outlined in ACSA's evaluation criteria.

1.2 CUPPS & CUSS Replacement:

1.3 CUPPS Replacement is required at the following airports: Oliver Tambo International (ORTIA), Cape Town International (CTIA), King Shaka International (KSIA), King Phalo Airport (ELS), Chief Dawid Stuurman Airport (PLZ), George Airport (GRJ), Kimberley Airport (KIM), Bram Fischer Airport (BFN) and Upington Airport (UTN).

NB: The CUPPS system and all its peripherals & accessories **must** comply with the latest IATA standards

1.4 Support & Maintenance:

Once the solutions are successfully implemented, the appointed service provider will be responsible for supporting and maintaining them. This support and maintenance will cover both software and hardware, in accordance with ACSA's 5-year upgrade cycle for its CUPPS and CUSS solutions.

1.5 Objective

The objective of this Scope of Work (SOW) is to define the technical, functional, and non-functional requirements for the supply, installation, commissioning, and support and maintenance of the new CUPPS and CUSS solutions.

2 SCOPE

By responding to this Scope of Work, the following business requirements are noted and will be adhered to.

2.1 In Scope

The following milestones are in scope for the CUPPS & CUSS Replacement project:

a) Removal of the old equipment
b) Installation of the new solutions hardware & software
c) Licence procurement
d) Configuration and customisation of the new solutions to suit airport's environment
e) System Testing
f) User Training
g) System commissioning
h) System post go-live support

2.2 Out of Scope

The following items are out of scope for the Service Provider but are included in the project, as ACSA will ensure their delivery through an independent consultant:

a) Enabling work for CUPPS and CUSS installation
b) Electrical, lighting, and power setup.
c) Redesigning areas for CUPPS and CUSS installation to streamline passenger queues and processing, requiring architects provided by ACSA to submit necessary plans to the municipality.
d) Redesigning power supply routes for the equipment, potentially needing an electrical engineer to document requirements and provide expert advice, with ACSA supplying this resource.
e) Drilling for network and power cable routes, fixing equipment, and addressing any structural impacts.
f) A structural engineer will be provided by ACSA to assess impacts and offer expert advice.
g) Mechanical engineers and quantity surveyors may be needed, with ACSA providing these resources.
h) Building alterations, including removing and installing counters, old equipment, and making structural changes such as carpentry, painting, and lighting adjustments.
i) ACSA will provide building and maintenance resources well-versed in such alterations to prepare the area before and after the installation of CUPPS and CUSS equipment.

j) Quality assurance and control to ensure tasks meet ACSA standards will require a construction/engineering project manager, also provided by ACSA.

3 BUSINESS REQUIREMENTS

The Service Provider shall provide, based on specifications contained in this document, all equipment, material, labour, and services required to implement the CUPPS & CUSS, including, but not limited to the following:

AIRPORTS COMPANY SOUTH AFRICA

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.1	Commissioning and operationalisation of the CUPPS solution	The service provider shall deliver all services necessary to commission and operationalise the CUPPS system.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.2	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall supply hardware, including servers, computer workstations, peripherals, and rack accessories as specified for the system, as well as any hardware specific to their solution. Following the Standards as described in Annexure D-IT Standards	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.3	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall supply software applications, excluding the users' own applications, needed to make the system fully operational. This includes providing databases, interfaces, populating database tables, and any other necessary configurations.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.4	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall supply all current airline-certified software and applications to be installed on the new upgraded hardware for airlines operating from the defined airports (e.g., BA's FLY application).	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.5	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall provide the latest certified version of Airline Check-in and Gate Terminal Emulation software, which shall be loaded for every airline operating from the defined airports.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.6	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall handle the installation and setup of the system hardware and software in accordance with pre-agreed installation standards.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.7	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall provide the final connection of hardware to the power infrastructure, including termination and fly leads that connect system equipment to data outlets and/or LAN equipment.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.8	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall provide as-built documentation and technical data for all CUPPS hardware and software components.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.9	Commissioning and operationalisation of the CUPPS solution	The Service Provider deliver the required interfaces, including full documentation	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.10	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall provide system configuration and integration with interfaced systems.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.11	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall conduct complete testing of the system.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.12	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall develop test plans, perform system testing, and oversee commissioning.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.13	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall provide user training, including training manuals, with a "train the trainer" approach at every site.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.14	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall offer maintenance and support in accordance with the specified service levels.	1	

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BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.16	Commissioning and operationalisation of the CUPPS solution	The Service Provider shall ensure close monitoring, tracking, and record-keeping for any equipment replaced during the upgrade, with asset management aligned with ACSA standards.	2	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.17	Commissioning and operationalisation of the CUPPS solution	The service provider shall be responsible for delivering, offloading, and transporting the hardware to the designated storage area.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.18	Commissioning and operationalisation of the CUPPS solution	The service provider shall be responsible for recording the new equipment on ACSA's asset template	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.19	Commissioning and operationalisation of the CUPPS solution	The service provider shall be responsible for transporting the hardware from the storage area to the installation site.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.20	Commissioning and operationalisation of the CUPPS solution	The service provider shall be responsible for the removal of the equipment from the site to the designated storage	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.1.21	Commissioning and operationalisation of the CUPPS solution	The service provider shall be responsible for scanning and recording the old equipment into the ACSA asset register system	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.1	CUPPS System Requirements	The CUPPS system shall operate 24 hours a day, 7 days a week, year-round.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.2	CUPPS System Requirements	Device Availability: A device shall be considered available only if all components are operating and fully functional. Aside from scheduled downtime, individual device availability must be at least 99.99%.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.3	CUPPS System Requirements	The system shall process all received messages from airline host systems, among others, within a timeframe that complies with IATA standards.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.4	CUPPS System Requirements	Based on common practice, it is expected that host transactions will be processed at a speed that complies with IATA standards.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.5	CUPPS System Requirements	The system shall be capable of running multiple terminals as well as supporting multiple airports.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.6	CUPPS System Requirements	The Service Provider shall deliver a benchmark document that describes the following: a) The CUPPS system load on a regular basis. b) The CUPPS system load during peak hour processing. c) Any other relevant information deemed important by the Service Provider.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.7	CUPPS System Requirements	The system shall generate monthly availability reports in accordance with the Performance Level Service Schedule.	2	

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BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.8	CUPPS System Requirements	The system shall manage at least the following: a) Remote control of equipment for analysis, testing, and maintenance. b) Remote configuration capabilities. c) Monitoring of server and software status. d) Software distribution functions.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.9	CUPPS System Requirements	The system shall be scalable and expandable to accommodate future increases in the number of workstations at any of the deployed airports.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.10	CUPPS System Requirements	The workstations at ACSA airports shall be connected to the CUPPS VLAN either via wired or Wi-Fi connections, with the primary connection option being through a wired connection.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.11	CUPPS System Requirements	The CUPPS application servers shall be located in the ACSA core rooms and will include the capability for remote monitoring.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.12	CUPPS System Requirements	For redundancy, each of the CUPPS servers shall be installed in separate core rooms. CUPPS will be provided at 3 regional airports and 6 local airports, and airlines using these connections will not need to supply additional connectivity. Each airline is required to use the IP circuits provided by the Service Provider.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.13	CUPPS System Requirements	User interaction with the system shall incur no noticeable delay, in accordance with airline application specifications.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.14	CUPPS System Requirements	The system shall be able to accept a wide range of CUPPS-compliant input and output peripherals. Password protection must align with ACSA's password policy.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.15	CUPPS System Requirements	The system shall provide multiple levels of password-protected security.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.16	CUPPS System Requirements	The CUPPS and CUSS systems shall operate as an integrated platform, performing all required processes. Each of the Passenger Processing Systems shall function seamlessly within a common-use environment.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.17	CUPPS System Requirements	The CUPPS workstations shall be integrated with scales at the check-in counters, allowing airline users to weigh, tag, and drop checked-in luggage.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.18	CUPPS System Requirements	The Service Provider shall install all core equipment necessary for the CUPPS upgrade to ensure it is fully operational.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.19	CUPPS System Requirements	The Service Provider shall conduct quarterly redundancy and disaster recovery tests, providing reports with the results to ACSA. Immediate actions must be taken to resolve any failures. These tests must adhere to ACSA's testing procedures.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.20	CUPPS System Requirements	The platform software includes all software necessary to enable CUPPS functionality, such as operating systems, databases, and data exchange software where required, except for software supplied by the application providers (airlines).	1	

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BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.2.21	CUPPS System Requirements	The CUPPS solution must facilitate seamless integration with any Flight Information Display System (FIDS) utilised by the Airports Company of South Africa. This integration is essential for the efficient management of screen activations and deactivations pertaining to check-in and boarding gates. The solution should encompass the following capabilities: **Universal FIDS Compatibility:** The CUPPS solution shall facilitate integration with any Flight Information Display System (FIDS) application or solution implemented at ACSA airports' CUPPS counters, irrespective of vendor or underlying technology. **FIDS Screen Activation/Deactivation Management:** CUPPS must enable FIDS application or solutions to automatically or manually activate and deactivate FIDS-linked screens at check-in counters and boarding gates based on operational schedules and flight events. **Event-Driven Automation: T**he integration must support event-based triggers (e.g., flight opening/closing, gate changes) to dynamically update FIDS displays and associated screens.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.1	CUPPS System & Cupps Workstation Specification	The system workstations shall be connected via the CUPPS communication infrastructure to the core computer room, which will be provided and managed by ACSA. The service provider will manage and maintain the workstations. The Service Provider shall also supply the routers and gateways necessary for airline host connectivity.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.2	CUPPS System & Cupps Workstation Specification	The system workstations shall be mutually independent of each other, allowing, for example, two CUPPS workstations at the same gate counter to access two different hosts simultaneously.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.3	CUPPS System & Cupps Workstation Specification	The system peripherals shall support the latest IATA Recommended Practices.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.4	CUPPS System & Cupps Workstation Specification	The system shall enable any authorised user to access non-airline applications, such as the display activation system, from any CUPPS workstation.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.5	CUPPS System & Cupps Workstation Specification	The system's workstations shall be capable of spooling output to a peripheral device that is physically connected to another workstation.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.6	CUPPS System & Cupps Workstation Specification	The system shall service all airlines, and the Service Provider shall be responsible for verifying the airline host to determine host requirements	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.7	CUPPS System & Cupps Workstation Specification	The system shall be able to centrally store user data, peripheral data, login/logout times and durations, as well as other statistical data.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.8	CUPPS System & Cupps Workstation Specification	The system shall be capable of accessing ACSA's flight activation display system to facilitate FIDS transactions from all counters and gates.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.9	CUPPS System & Cupps Workstation Specification	The CUPPS system shall allow access to the Baggage Reconciliation Systems from any CUPPS workstation.	1	

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BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.10	CUPPS System & Cupps Workstation Specification	The CUPPS PC shall be installed with all necessary scale data exchange software and interface cables to accept data from the counter scale for updating weight in the DCS.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.11	CUPPS System & Cupps Workstation Specification	The system shall utilise the latest proven technology, widely adopted by many international airports and airlines.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.12	CUPPS System & Cupps Workstation Specification	The Service Provider shall recommend and provide the hardware and server configuration that best supports the overall design solution. . Service Provider to follow ACSA standards as mentioned in Annexure xx	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.13	CUPPS System & Cupps Workstation Specification	All equipment shall be new and commercially off-the-shelf products (COTS). The hardware specifications detailed in this document represent the minimum requirements, and the Service Provider is required to supply the latest available hardware at the time of delivery.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.14	CUPPS System & Cupps Workstation Specification	The system design must allow for a server to be taken offline and replaced without causing any disruption to CUPPS operations.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.15	CUPPS System & Cupps Workstation Specification	The service provider shall supply all termination components in the cabinets, including patch cords, to ensure a fully operational system unless otherwise noted.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.16	CUPPS System & Cupps Workstation Specification	There shall be no single point of failure in the system.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.17	CUPPS System & Cupps Workstation Specification	The system shall have the capability to remotely lock counters that are not assigned to airlines for a specific period.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.18	CUPPS System & Cupps Workstation Specification	The system's workstations and peripherals shall be IATA CUPPS compliant and certified for use by supported airlines at ACSA airports.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.19	CUPPS System & Cupps Workstation Specification	The system's workstations shall be of the latest certified make and model available from the CUPPS Service Provider.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.20	CUPPS System & Cupps Workstation Specification	The workstations should be selected to perform efficiently throughout the 5-year maintenance period and to accommodate all anticipated peripheral connections at each position. Special care must be taken to ensure compatibility with scales and other peripheral interfaces connected to the workstations.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.3.21	CUPPS System & Cupps Workstation Specification	The required Video/Visual Display Unit must be compatible with and fit into the existing ACSA desks at the various airports.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.4.1	Reporting Requirements (Statistics):	The system shall store and manage at least the following, and any other types of reports that the business may want: a) Up-time of equipment, including but not limited to: i. Per CUPPS workstation. ii. Per airline user signing on to use the workstation. iii. Per airline DCS/host system. iv. Per airport and network (across 9 ACSA Airports). v. Additional statistics available to the contracted party. b) Number of boarding cards printed. c) Number of baggage tags printed. d) Number of transactions processed through other peripherals, categorised by peripheral.	1	
BR 3.1	BR 3.1 SUPPLY AND INSTALLATION OF CUPPS SOLUTION	BR 3.1.4.2	Reporting Requirements (Statistics):	The system shall be able to provide statistical information on a daily, weekly, monthly, quarterly, seasonal, and yearly basis. This statistical information shall be organized into a table that can be read by a Business Intelligence (BI) tool.	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.1	Boarding Pass Printer (BPP) Requirements	The Boarding Pass Printer (BPP) shall meet the following minimum requirements: a) A receipt-style printer capable of printing 1D and 2D (PDF417) barcodes that comply with IATA BCBP (Bar Coded Boarding Pass) requirements. The barcodes must include machine-readable boarding pass data formatted to support single-segment, multi-segment, and interline data encoding. i. Direct Thermal ii. 200 dpi iii. LCD Display iv. Single feed path v. Interface USB vi. Roll paper feeder	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.2	Bag Tag Printer (BTP)	The Bag Tag Printer (BTP) shall meet the following minimum requirements: i. Identical model to BPP ii. ID/ 2D (PDF417) barcode printer iii. Direct thermal iv. 200 dpi v. LCD display vi. Single feed path vii. Interface: USB viii. Roll paper feeder	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.3	Boarding Gate Reader (BGR)	The Boarding Gate Reader (BGR) shall meet the following minimum requirements: i. The supplied BGR shall read 1D / 2D bar code printed boarding documents and mobile device ii. Boarding passes shall support the various functional requirements of all airlines supported. iii. Read time as specified in the IATA standards.	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.4	Keyboard and Mouse Requirements	The keyboard and mouse shall meet the following minimum requirements: i. Standard, good quality 101 keyboard, ii. Laser mouse, good quality (USB), iii. Interface: USB.	1	

AIRPORTS COMPANY SOUTH AFRICA

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BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.5	Magnetic Stripe Reader (MSR) & Optical Character Reader (OCR) Requirements	The Magnetic Stripe Reader (MSR) & Optical Character Reader (OCR) shall meet the following minimum requirements: i. Three-track MSR (conforming to ISO 7811/2-5 tracks 1, 2 and 3.),able to read credit and debit cards, loyalty cards and frequent flyer cards as well as MRZ's from passports, ID cards, machine-readable visas and ICAO9303 travel documents. ii. Loose standing, including the bracket to be fixed to the end/table. iii. Interface: USB. iv. Bi-colour LED and audible alarm providing good/bad read indication. v. Firmware download/upgrade capability	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.6	Bar Code Reader Requirements	The Bar Code Reader shall meet the following minimum requirements: i. The supplied BCR shall read 1D / 2D bar code printed boarding ii. documents and mobile device iii. boarding passes and shall support the various functional requirements iv. of all airlines supported. v. Visible light and audible read confirmation vi. Face down presentation vii. Read time: less than 1.0 seconds. viii. Interface: USB ix. Firmware download/upgrade	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.7	General-Purpose Printer (GPP) Requirements	The General-Purpose Printer (GPP) shall meet the following minimum requirements: i. Dot matrix printer. ii. Multi-form print capability. iii. Tractor feed iv. Interface: USB v. Processing time as per the IATA standards	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.8	Securing Peripherals	The Service Provider shall provide and install brackets, fixtures, or other mechanisms to secure the peripherals and cables.	1	
BR 3.2	BR 3.2 CUPPS ACCESSORIES & PERIPHERALS SPECIFICATIONS	BR 3.2.9	Training:	a. The Service Provider shall provide formal "train the trainer" instruction sessions for approximately 100 resources. b. The sessions shall be formally prepared and presented. c. The content of the trainer's training shall be sufficient to enable the trainers to effectively present the training to end users. d. The training shall cover at least the following: i. CUPPS system sign-on and usage ii. Peripheral activation and usage iii. Basic Troubleshooting iv. Fault finding and reporting e. The Service Provider shall provide a training manual with the appropriate course material for each trainee. These training manuals shall be available in electronic format, allowing airline trainers to produce their own copies for use in training sessions. f. The Service Provider shall provide Computer-Based Training (CBT) software covering at least the items mentioned above in d) for continuous use by airport users.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.3	BR 3.3 INTERFACING BETWEEN CUPPS AND OTHER SYSTEMS:	BR 3.3.1	CUPPS Integration	a. The CUPPS system shall interface with the airlines' hosts for transactions and processing. b. The CUPPS system shall interface with the LDCS servers for transactions and processing. c. The CUPPS system shall interface with the Baggage Handling System at the airport to provide active and non-active Baggage Status Messages (BSMs). d. The CUPPS system shall interface with the scales at each check-in counter.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Delivery, Storage and Handling - General	a) General i. The Service Provider shall deliver, store, and handle all materials for the project using methods that prevent damage, deterioration, and loss, including theft.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Delivery, Storage and Handling - General	a) General ii. The Service Provider shall fully comply with the delivery, storage, and handling instructions for each product, as recommended by the product manufacturer, industry standards, and project quality and standards.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Delivery, Storage and Handling - Delivery and Handling	b) Delivery and Handling i. The Service Provider shall coordinate and schedule deliveries to minimise long-term storage at the project site and to prevent congestion and overcrowding of allocated project spaces.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Delivery, Storage and Handling - Delivery and Handling	b) Delivery and Handling ii. The Service Provider shall adequately coordinate deliveries with the installation schedule to minimise holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.	2	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Delivery, Storage and Handling - Delivery and Handling	b) Delivery and Handling iii. The Service Provider shall deliver materials to the project site in an undamaged condition, in the manufacturer's original sealed containers or packages, complete with labels and handling instructions for storing, unpacking, protecting, and installation.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Delivery, Storage and Handling - Delivery and Handling	b) Delivery and Handling iv. ACSA shall inspect all materials upon delivery to ensure compliance with the contract and to verify that all products received are undamaged and properly stored.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Delivery, Storage and Handling - Delivery and Handling	b) Delivery and Handling v. The Service Provider shall dispose of all unnecessary packing materials in accordance with the manufacturer's requirements and the project Health, Safety, and Environmental (HSE) plan.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Storage	c) Storage i. The Service Provider shall store the materials in ACSA's warehouse	2	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.1	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Storage	c) Storage ii The stored materials in the warehouse will be barcoded by ACSA. In the case of installation, the Service Provider shall receive the materials after ACSA scans and updates them in the Configuration Management Database (CMDB) system.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.2	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Submittals	Submittals a) The Service Provider shall propose a System Development Methodology, along with project deliverables and submittals, based on international standards for Systems Engineering, Software Engineering, and Project Management.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.2	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Submittals	Submittals b) The approved methodology will be defined in the Project Management Plan and the list of project deliverables and submittals will be listed and maintained in the Project Document Registry by the Service Provider.	1	

BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.2	Delivery, Storage and Handling; Submittals; Warranty; Software Service Agreement; and Intellectual Property Requirements. - Submittals	# Project Phase 1 Design	Project Task and Deliverable 1. Project Management Standards i. Project Management Plan ii. Project Quality Plan iii. Project Procurement Plan iv. Project Communication Plan clearly spelling out engagements with stakeholders v. Project Document Registry vi. Project Status Review Report 2. System Material Data (Materials Approval Form): i. Manufacturers' datasheets, including full product/software description. ii. Detailed technical, functional, and operational specifications, benchmark data (to support hardware configuration), including storage and handling requirements, and environmental requirements. 3. Detailed Design Specification (DDS)-Comprehensive requirements and functional description. 4. Equipment Rack Elevation Drawings 5. Data Cabling Schedule showing all patching details. 6. Functional and Physical Interface Control Design (ICD) documents.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
				7. Functional Process Flow and Process Description. 8. Test Plans for Factory/Functional Acceptance Test (FAT), Laboratory Acceptance Test (LAT), Site Acceptance Test (SAT) and Airport Integration Test (AIT). 9. Test Cases and Test Procedures for each test phase. 10. Training Plan. 11. Warranty Support Plan.		
				2 Installation 1. Installation and Test Plan (ITP) 2. Inspection Request 3. Inspection Report 4. Snag List		
				3 Testing & Commissioning 1. Test Report 2. Commissioning Report		
				4 Training 1. Training Schedule 2. Training Manual 3. Training Certification 4. Training Report.		
				5 Project Closure a) As-Built Documentation, Drawings and Warranty b) Detailed Bill of Materials Support c) Asset Register d) Spare Parts List e) Operations and Maintenance Manual f) Software License Certificates g) Maintenance & Warranty i. Warranty Support Plan ii. Preventive Maintenance Schedule iii. Service Level Agreement		

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements - General	a) General i. The system's warranty shall cover the complete scope of works as per the system specification and contract documentation, including any additional scope as a result of a Change Order.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements - General	a) General ii. The system shall be warranted for a period of 48 months (minimum) after the Provisional System Acceptance.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements - General	a) General iii. The system's warranty shall include all software, software setup and configuration work, software modifications, changes and enhancements completed under the scope of work and meet all requirements specified herein and are free of defects and inconsistencies.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	b) Hardware Warranty i. The Service Provider shall maintain and service all hardware and equipment to address any and all malfunctions due to manufacturing or installation defects at no cost to ACSA during the warranty period.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	b) Hardware Warranty ii. The Service Provider shall be solely responsible for the warranty (48 months) period and support and maintenance of all supplied equipment during this period and shall provide on-call maintenance including both preventative and corrective maintenance and replacement parts as required by the equipment manufacturer or as is necessary for normal operation of the System. according to the specified and agreed SLA	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	b) Hardware Warranty iii. The warranty shall allow for replacement or repair of failed components. Withing the required SLA	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	c) Software Warranty (Licences) i. All software necessary to compile, modify, and maintain the software developed for this specification shall be included in this warranty.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	c) Software Warranty (Licences) ii. The service provider shall provide software warranty and licences for the system.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	c) Software Warranty (Licences) iii. The licencing costs shall factor in the warranty period	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	c) Software Warranty (Licences) iv. The warranties shall include the price of all software upgrades and computer operating system upgrades during the warranty period.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	c) Software Warranty (Licences) v. If a new version of the system software becomes available during the warranty period, it shall be upgraded as part of the warranty.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	d) System Performance Warranty Test i. After the completion of SAT (Site Acceptance Testing), the Service Provider shall maintain responsibility for the system equipment and components for a thirty (30) day period of operations, during which time, all the electrical and mechanical equipment, fixtures and connected devices will be energized and operated by Service Provider and airport operators. The 30-day period commences once the Service Provider has submitted signed SAT results to ACSA.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	d) System Performance Warranty Test ii. The Service Provider shall be required to provide adequate support personnel to perform any system configuration and technical support activities in order to keep the system fully operational	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	d) System Performance Warranty Test iii. The 60-day system performance warranty test shall commence at a time agreed between ACSA and the Service Provider. Only once the system has been thoroughly tested, deployed and handed over to Operations can the warranty start.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	d) System Performance Warranty Test iv. If during the agreed period, the system fails to operate and perform in accordance with the Contract terms, the Service Provider is required the resolve the issue and the thirty (30) day system performance warranty test shall begin again.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	d) System Performance Warranty Test v. ACSA shall commence the System Provisional Acceptance Test procedure, as per the contract terms.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.3	Warranty Requirements	d) System Performance Warranty Test vi. The Service Provider shall repair and replace any equipment or software that fails to meet the	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.4	Software Service Agreement	a) General: In order to maintain optimum operational conditions, as part of fulfilling software warranty requirements, the Service Provider shall undertake the following: i. The Service Provider shall resolve a software defect by delivering a new version of the software after completing test certification or installing a temporary software patch or approved resolution procedure, to allow operations to continue.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.4	Software Service Agreement	a) General: In order to maintain optimum operational conditions, as part of fulfilling software warranty requirements, the Service Provider shall undertake the following: ii. The Service Provider shall also be responsible to resolve any third party software delivered and installed as part of the integrated system. i.e., FIDS, AMS.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.4	Software Service Agreement	b) Licensing i. All the software supplied under this project shall be licensed for perpetual use by ACSA, without using any license key or codes. Users should be able to use the system concurrently without any restrictions.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.1.4	Software Service Agreement	b) Licensing ii. All the software shall be licensed for use at all installations, as defined in this specification.	1	

AIRPORTS COMPANY SOUTH AFRICA

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	a) The Service Provider shall design, supply, install, test and commission all material required for the CUSS platform.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	b) The CUSS platform specified shall follow the key principles defined in the latest version of IATA CUSS Technical Specifications, the best practices adopted by all major international airlines and major international airports.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	c) The CUSS platform shall utilise the airport-installed CUPPS/CUSS System or direct connection for host connectivity to support airlines' DCS applications and peripherals such as ATB and BTP equipment.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	d) The CUSS platform shall support multi-lingual capabilities, including English and other languages to be defined by ACSA business.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	e) The CUSS platform shall support multiple data entry methods, such as touch screens, onscreen keyboards (multi-language), 2D Barcode scanners and passport (OCR) readers/scanners.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	f) The CUSS platform shall include application and system monitoring sensors and tools that shall provide automatic alerts and warnings to central (internal and external) monitoring systems.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	g) The CUSS platform shall support multiple airlines	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - System Requirements:	h) The CUSS kiosks shall allow passengers to perform all aspects of the passenger check-in process, including the following minimum operations: i. Check-in ii. Seat Selection iii. Print Boarding Pass iv. Passport Check v. Security questionnaire vi. Print Baggage Tag.	1	

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BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.1	Commissioning and Operationalisation of the CUSS solution - Design Requirements	i) The scope of work includes the following. Preliminary and detailed design, including: i. CUSS Principles ii. CUSS Kiosk Architecture iii. CUSS Hardware Architecture iv. CUSS Software Architecture v. CUSS Kiosk Application vi. ICD and other design submittals. vii. CUSS Kiosk shall include the following: viii. CUSS Kiosk Enclosure ix. PC x. CUSS Application xi. Touch Screen xii. Boarding Pass Printer and Scanner (2D capable) xiii. Magnetic Card Reader xiv. Credit Card Reader and printer xv. UPS xvi. Passport Reader and Scanner xvii. Bag Tag Printer xviii. Receipt Printer xix. Door sensor	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.2	Commissioning and Operationalisation of the CUSS solution - Design Requirements	a) General i. The CUSS system shall support multiple CUSS-certified applications.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.2	Commissioning and Operationalisation of the CUSS solution - Design Requirements	a) General ii. The CUSS system shall be designed to support multiple airlines	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.2	Commissioning and Operationalisation of the CUSS solution - Design Requirements	b) System Management i. Automated Remote Updates (ARU) shall be provided for all software components to facilitate deployment to CUSS Kiosks and or CUSS workstations.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.2	Commissioning and Operationalisation of the CUSS solution - Design Requirements	c) Data Security i. PCI-DSS Compliance must be adhered to in all cases	1	

BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.4	Commissioning and Operationalisation of the CUSS solution - Hardware - CUSS KIOSK	a) CUSS Kiosk 1. Integrated Kiosk Enclosure: i. Stable free-standing chassis. ii. Maintenance doors or panels to be secured with a lock. iii. All kiosks within the installation to use an identical key. iv. Locking mechanism to be designed so that key cannot be removed from the lock unless the panel is securely closed. 2. Uninterrupted Power Supply: i. Battery charging and management system. ii. PC Software to be configured to initiate the shutdown of the kiosk as well as central monitoring system for the UPSs after 10 minutes on battery. 3. Card Reader: i. Multi-format card reader; capable of reading ISO tracks 1, 2 & 3. ii. Reading 3 track credit card information, ISO 7811/2-6. iii. Accepting the following: magnetic cards, such as Credit cards etc. iv. Read the following card formats: ISO Read the following card formats: ISO 7810, ISO 7811, ISO 7812, ISO 7813. 4. Passport Reader: i. The passport reader shall be equipped with extended input tray to facilitate self-service operation. ii. The Passport Reader shall read OCR A as per ISO 1073/I and read OCR B as per ISO 1073/2. iii. OCR read rate shall be minimum 95%. iv. The Passport Reader shall be compliant with ICAO 930 to accept Passports and ID cards. v. The Passport Reader shall have an in-built functionality to flag “unreadable” or “ambiguous” characters in the output text stream. vi. The Passport Reader shall support more than 45 characters per line of text, with 3 lines read. vii. The device shall read the ICAO compliant biometric Passport “e-passport” ISO 14443 Type A and B including anti-collision, and auto detection. 5. Barcode Reader: i. The device shall be flatbed model of barcode scanning. ii. The device shall read BCBP with 2 Dimensional Symbols (2-D) PDF417 barcodes. iii. The device shall read the documents (tickets/bag tags) with 1-dimensional (1-D) barcodes (code128.code39, Industrial (2 of 5). iv. The device shall read Mobile Phone 2D (e-BCBP) Barcodes (Aztec, EAN13, Datamatrix). v. The device shall have omnidirectional scanning and decoding without any moving parts and shall utilise LED based illumination	1	

				6. Secure Card Access Devices i. The device shall be complaint to the international standards of ISO 7816, ISO 14443, and ICAO 9303. ii. The audio output from the PC to be connected to a stereo amplifier that drives a stereo pair of 8-watt speakers mounted inside the kiosk and the volume control shall be adjustable through settings in the CUSS platform. 7. Automated Ticketing and Boarding (ATB) Printer: i. ATP Printer shall be capable of continuous printing on up to 9-inch-wide stock. ii. ATB Printer shall be capable of printing Boarding Pass Documents including 2-D barcode compliant with IATA PDF 417. iii. ATP Printer shall have Direct Thermal Technology print-head capable of printing high quality 1D/2D barcodes. iv. ATB Printer shall be connected to the CUSS workstation through USB or serial port v. Print resolution requirements shall be sufficient to conform to the IATA's BCBP standard at least 203 dots/inch. 8. Baggage Tag Printers (BTP): i. Baggage Tag Printer shall be capable of printing a document on bag tag size stock. ii. Baggage Tag Printer shall have Direct Thermal Technology print-head, and it shall be capable of printing high quality 1D barcodes. iii. Baggage Tag Printer shall be connected to the CUSS workstation through the USB or RS232 serial port. 9. Sensors i. Door position status. ii. Door- lock status. iii. Ticket in output area. iv. Diagnostics switch activated. v. Low paper status on all printers. vi. Low paper status and ticket status shall be implemented using optical detectors. vii. These sensors shall be connected to an I/O controller. viii. I/O controller shall have visual indication of sensor status using LEDs or display panel. ix. The I/O I/O controller shall interface with the PC using parallel, serial or USB port. x. Software device driver and diagnostics shall be installed on the CUSS platform to provide the status information required under the CUSS standard. xi. Each Kiosk Enclosure material structure and design shall be based on approved standards and agreed after coordination with ACSA and Service Provider Authorised Representatives.		

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BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:		Commissioning and Operationalisation of the CUSS solution - Software - Common Launch Screen	i. The system shall have a common launch screen in the foreground as long as there is no active session.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Software - Common Launch Screen	ii. The screen shall be based on the airline logo for those airlines and handling agents with a kiosk application.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Software - Common Launch Screen	iii. There shall be an idle screen after a specific period of time when no CUSS application is active.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Software - Common Launch Screen	iv. The passenger touches the idle screen and reaches the common launch screen.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Software - Common Launch Screen	v. In the case that all registered kiosk applications are unavailable; stopped, disabled, or suspended, the platform management application shall show a "Kiosk not available" type of screen or any other message as defined by Operations.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Software - Common Launch Screen	vi. All screen layouts shall be according to the ACSA 's branding standards and shall be developed during workshops with the Service Provider.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Software - Common Launch Screen	vii. The launch screen should have a capability to incorporate additional URLs.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - System Manager:	1. Functionality provided by the System Manager shall include, but not limited to the following: i. Reporting errors, alerts and alarms encountered by device components. ii. Reporting of platform events such as application state changes, application events, etc. iii. Gathering statistical information iv. Remote control of the application with the features of load /stop/ suspend/ resume.	1	The System Manager is the defined platform interface for remote management of the kiosk. It is an interface implemented on the kiosk, allowing for remote connection from authorized system managers

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BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - System Manager:	2. The System Manager interface shall provide the ability to control and monitor the platform through interfaces with the device components, and the application manager functions in the platform.	1	The System Manager is the defined platform interface for remote management of the kiosk. It is an interface implemented on the kiosk, allowing for remote connection from authorized system managers
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - System Manager:	3. The system Manager shall be also responsible for interfacing with the common launch screen platform to perform various actions, which are not limited to: i. Removing application icons from the selection (launch) screen when individual applications are disabled, stopped, suspended, or become unavailable for whatever reasons. ii. Display an appropriate general “Kiosk not available” screen when applications are disabled, stopped, suspended or unavailable or any other message as defined by Operations.	1	The System Manager is the defined platform interface for remote management of the kiosk. It is an interface implemented on the kiosk, allowing for remote connection from authorized system managers
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Airline Application:	i. The Airline Application has interfaces to the airline kiosk management application. The CUSS platform shall support such communications according to the IATA CUSS Technical Specification standard.	1	The Airline Application is the application provided by the airline to enable the passenger check-in and print the documents.
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Airline Application:	ii. Application to be installed on the CUSS platform shall be supplied by each airline and handling agent. The Service Provider shall install the application according to the documentation supplied with each airline application.	1	The Airline Application is the application provided by the airline to enable the passenger check-in and print the documents.
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Airline Application:	iii. All network and configuration requirements for the airlines and other stakeholders will be facilitated through ACSA.	1	The Airline Application is the application provided by the airline to enable the passenger check-in and print the documents.

AIRPORTS COMPANY SOUTH AFRICA

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BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Airline Application:	iv. Only CUSS certified applications shall be installed on the CUSS platform.	2	The Airline Application is the application provided by the airline to enable the passenger check-in and print the documents.
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Security	i. Authorised users shall log into the system using a unique username and password.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Security	ii. Depending on assigned user access privileges, the user shall be either granted or denied access to individual application, screen, or data.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Security	iii. System administrator shall be able to add, delete, set, And change user privileges and access authorisation via a GUI built into the general operations of the application and servers. All system parameters shall be configurable by the system administrator.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Security	iv. The system shall have an idle time period and if any workstation is determined as inactive; it shall be automatically logged out of the system. The idle time shall be configurable by the system administrator. This idle time period shall be recorded in the log file including workstation identifier, date, and the user information.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Security	v. The system shall provide an audit trail of all the transactions. The audit file shall log any changes on the application configuration, data structure or database records and shall contain the details of the change with the workstation identifier, date, and user information.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Security	vi. All supplied systems and workstations shall be protected by virus protection software. The Service Provider shall submit the exact model and configuration of it.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Network	i. CUSS shall utilize the Airport Network infrastructure to provide services to all devices and kiosks. The primary and secondary servers shall be located in two different main communication rooms and shall be connected to the network switches via the predefined Airport Network requirements.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.5	Commissioning and Operationalisation of the CUSS solution - Network	ii. All kiosks shall be connected to a dedicated VLAN using an interleaved approach to avoid total disruption of an entire row of workstations. The VLAN assignment shall be in a way that in the same area all the kiosks shall not become down in case of a network failure.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.6	Commissioning and Operationalisation of the CUSS solution - Integration	i. The CUSS system shall provide airline host connectivity and shall fully support airline system hosted peripherals such as ATB and BTP printers connected over standard communication protocols such as TCP/IP, ALC, UTS and X.25 via.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.6	Commissioning and Operationalisation of the CUSS solution - Integration - Airline Departure Control System	ii. All systems shall be capable of being SNMP managed and monitored by the centralized remote management system.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.6	Commissioning and Operationalisation of the CUSS solution - Integration - Airline Departure Control System	iii. Airport installed CUPPS system to integrate with the Departure Control Systems of the airlines.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.6	Commissioning and Operationalisation of the CUSS solution - Integration - Local Departure Control System	i. The CUSS system shall use an Airline Application provided by the LDCS supplier to interface with the LDCS servers for check-in transactions.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.7	Commissioning and Operationalisation of the CUSS solution - Test Platforms	i. The Service Provider shall construct and manage a test laboratory or test centre in order to facilitate the development of systems and reduce the risk of systems integration. The Service Provider shall include this as part of the system development plan to install a test system and perform functions and integration test using the facilities in the Test Centre. The test centre and training infrastructure shall be located in the ACSA Data-Centre Building.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.7	Commissioning and Operationalisation of the CUSS solution - Test Platforms	ii. The Service Provider shall supply and install a test system, including hardware and software systems, for the purpose of functional, integration and performance testing. The test system shall be able to support the following environments: - Test: This environment shall be used for migration or upgrades after completion of the SAT phase. - Training: This environment shall be the same as when the SAT phase commences and shall keep pace with upgrades to the production environment. - One kiosk unit shall be used to evaluate the material and colour properties.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.2.8	Commissioning and Operationalisation of the CUSS solution - Spare Parts	a) **The Service Provider shall ensure the required spares is available to service the solution in totality according to the required SLAs. Spares is not a separate costed line item. It must be part of the monthly hardware maintenance fees.**	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.1	Execution - Installation	a) In-Progress Inspection i. The Service Provider shall complete Approval of Material Inspection documents before any installation inspection is scheduled.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.1	Execution - Installation	a) In-Progress Inspection ii. At ACSA 's discretion, the Service Provider shall perform in progress inspections that shall include visual inspections of equipment, wiring practices, cabling, placement of equipment, marking of cables and adherence to safety procedures. In addition, ACSA, or its representative, may conduct additional inspections at any time.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.1	Execution - Installation	b) Final Inspection i. The Service Provider shall conduct a final inspection that encompasses all portions of the installation.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.1	Execution - Installation	b) Final Inspection ii. This inspection shall be performed to ensure that all aspects of the installation has been performed in accordance with these Specifications, standard industry practices and the publications referenced herein.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.1	Execution - Installation	b) Final Inspection iii. The non-compliance items shall be noted by the Service Provider during this inspection.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.1	Execution - Installation	b) Final Inspection iv. ACSA and the Service Provider shall witness the material inspection.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.1	Execution - Installation	c) Corrective Action and Verification Inspection i. The Service Provider shall perform corrective actions to ensure that all non-compliance items identified during the final inspection have been corrected.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	a) General i. The Service Provider's project manager shall initiate and coordinate weekly project review meetings and produce weekly status reports as minutes of the weekly review meeting.	3	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	a) General ii. The project manager shall produce a monthly project status report, within five working days from the last day of each month.	3	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	a) General iii. The CUSS\ CUPPS Service Provider shall support the ESB Service Provider coordinates with all relevant system subcontractors, and not limited to the following, ACSA, Airlines, Ground Handlers, and others, in order to facilitate the development and implementation of required interfaces and integrated airport operational functions.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	a) General iv. Each ICD and Airport Business Rules defined for CUSS shall be Approved by ACSA and other parties involved in the interfaces.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	b) CUSS System Kiosks i. The Service Provider shall coordinate with ACSA in determining The locations of the CUSS Kiosks and the architectural as well as physical features that need to be accommodated in the design and final installation.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	b) CUSS System Kiosks ii. The Service Provider shall schedule and coordinate a series of Workshops with ACSA, other relevant system contractors, Operations, and Airlines for the development and finalisation of ICDs and business rules for the operations of the CUSS systems and systems that interface with it.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	b) CUSS System Kiosks iii. The Service Provider shall coordinate with each system contractor for the development of system interfaces and ICDs.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.3.2	Execution - Coordination	b) CUSS System Kiosks iv. The Service Provider shall be responsible for planning and testing of airport business processes involving the CUSS system and its interfaces.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.4	CUSS SYSTEM REQUIREMENTS:	a) The CUSS System shall operate 24 hours per day, 7 days per week, throughout the year.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.4	CUSS SYSTEM REQUIREMENTS:	b) Device Availability: A device shall be considered available only if all components are operating and fully functional. Besides scheduled downtime, individual device availability shall be at least 99.99 %	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.4	CUSS SYSTEM REQUIREMENTS:	c) All received messages from, but not limited to, airline host systems and CUSS management workstations, shall be processed in less than 300 milliseconds.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.4	CUSS SYSTEM REQUIREMENTS:	d) Based on common practice it is expected that host transactions will be processed in less than 2 seconds, but at least not more than 4 seconds.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.4	CUSS SYSTEM REQUIREMENTS:	e) .The System shall be capable of running multiple terminals as well as airports.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	a) The Service Provider shall provide the routers/gateways required for airline host connectivity, if not provided as part of the CUPPS communications infrastructure. USS Kiosks shall be connected via the CUPPS communication infrastructure to the core computer room (provided by ACSA, Service Provider to manage).	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	b) The CUSS system shall have the capability to simultaneously run multiple airline applications that are performing various functions for the participants' airline passengers on a shared basis.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	c) The Service Provider shall provision all the solution consumables, including paper stock	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	d) The CUSS system shall be of the latest technology and widely used in many international airports by many international airlines – only the latest production model would be acceptable.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	e) The Kiosks shall be equipped with readers to identify the passenger, including bar-coded e-ticket, paper barcode boarding passes, mobile phone boarding passes, passport, frequent flyer card, credit card, smart card, and produce boarding passes and bag tags after validating and capturing the passenger's travel documents.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	f) The CUSS solution shall be efficient in processing passengers with and without hold baggage.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	g) Administration and Configuration: The system-specific configuration and specific parameters shall be stored in the System database.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	h) The Service Provider shall recommend and provide the hardware and server configuration that best serves the overall design solution. All hardware shall be from a reputable manufacturer capable of a high level of maintenance and service.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	i) Hardware specifications detailed in this document are the minimum requirements. The Service Provider is required to supply the latest available hardware at the time of delivery.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	j) The system design shall permit a server to be taken offline and replaced without any disruption to CUSS operations.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	k) The System shall be scalable and expandable to accommodate future increases of the number of CUSS kiosks in any of the deployed Airports.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	l) The CUSS kiosks at ACSA airports shall be connected to the CUPPS VLAN either wired through 1 x Gigabit or 100/1000 MBit TX NIC or wireless through RF wireless network (802.11b/g/n) as a redundancy option.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.5	CUSS NON-FUNCTIONAL REQUIREMENTS	m) The CUSS application servers shall be located in the ACSA Core rooms and shall provide the capability for remote monitoring.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.6.1	CUSS REPORTING REQUIREMENTS - Reporting (Statistics):	Reporting (Statistics): The system shall store and manage at least the following, and any other types of reports that the business may want: a) Use time of equipment, including but not limited to: i. Per CUSS kiosk. ii. Per hour per CUSS kiosk or specified period such as monthly, quarterly and annually. iii. Per Airline DCS / host system per airport iv. Additional statistics to be decided in consultation with ACSA	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.6.1	CUSS REPORTING REQUIREMENTS - Reporting (Statistics):	Reporting (Statistics): The system shall store and manage at least the following, and any other types of reports that the business may want: b) Number of boarding cards printed: i. Number of baggage tags printed. ii. Number of transactions processed through other peripherals, by peripheral. iii. (The System shall be able to print out various customizable reports iv. The System shall be able to provide statistical information on a daily and weekly basis in a text file format.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.6.1	CUSS REPORTING REQUIREMENTS - Reporting (Statistics):	Reporting (Statistics): The system shall store and manage at least the following, and any other types of reports that the business may want: c) All reports shall be generated in Power Bi	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.7.1	CUSS interfacing with Airline hosts, LDCS and BHS - CUSS Interfaces	a) The CUSS system shall interface with the airlines' hosts for transactions.	1	

AIRPORTS COMPANY SOUTH AFRICA

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.7.1	CUSS interfacing with Airline hosts, LDCS and BHS - CUSS Interfaces	b) The CUSS system shall interface with the LDCS servers for transactions. (If installed). This is for airlines that do not have a connection to DCS.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.7.1	CUSS interfacing with Airline hosts, LDCS and BHS - CUSS Interfaces	c) The CUSS system shall interface with the Baggage Handling System to provide active/non-active BMSs.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.8.1	System's Equipment Control & Configuration - Supervision	The system has to manage at least the following: - Remote control on equipment to analyse, test and maintain. - Remote configuration. - Server and software status - Software distribution.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.9.1	CUSS Application Servers, Gateways and Switches	a) All Servers, gateways, routers, and switches should be 19" rack-mounted in cabinets provided by ACSA. Should be provided with all software required to operate and be managed.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.9.1	CUSS Application Servers, Gateways and Switches	b) The CUSS Application servers shall be located in ACSA core rooms and shall include the CUSS Management Servers as well as the Web servers for providing access to browsers, mainly for remote monitoring.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.9.1	CUSS Application Servers, Gateways and Switches	c) For redundancy, each of the CUSS servers shall be installed in separate core rooms. It is required that each airline shall have two separate WAN circuits, to ensure redundant WAN Connectivity to their hosts. The CUPPS network is provided at ORTIA, KSIA and CTIA and shall be used as the main WAN links for CUSS connectivity.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.9.1	CUSS Application Servers, Gateways and Switches	d) The CUSS servers shall fully monitor and manage the CUSS environment.	2	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.9.1	CUSS Application Servers, Gateways and Switches	e) The Service Provider shall install all core equipment required for the CUSS system in order to be fully operational.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.9.1	CUSS Application Servers, Gateways and Switches	f) The equipment (PCs and Network equipment and server) shall be selected to operate the full term without upgrade or degradation of service. Lifecycle replacement to be considered for the pricing	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.10.1	System's Software Application Requirements - Cuss Application Software	a) The platform software consists of all the software included in the Kiosks except that supplied by the application providers (airlines).	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.10.1	System's Software Application Requirements - Cuss Application Software	b) The Service Provider is responsible of providing the Kiosks with the latest version of the following software environment: Microsoft Windows Operating System, Internet browser, Java virtual machine, miscellaneous software containers and plug-ins.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	a) Presentation of all platform processes including browser and device components.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	b) Providing data and statistical information to the remote management System via the system manager interface.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	c) Controlling/monitoring components states.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	d) Managing system security.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	e) Displaying common screens while no Kiosk application is active.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:

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BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	f) The CUSS Management Application shall be a web-based graphical tool for monitoring and managing a network of Kiosks spread in different locations in the airports.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	g) Allowing management workstations to connect and manage the Kiosks network.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	h) Each workstation can be configured separately with restricted access to various functions.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	i) Having the capability of event scheduling such as files transfer, operating systems commands, software updates and rebooting.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	j) Ability to display the status of each Kiosk as well as each device and sub-system connected to each Kiosk.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	k) Maintaining general information and statistics for each Kiosk and its peripherals.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	l) Allowing Kiosk views to be customized by group or status.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	m) Ability to interface with other Kiosk applications for handling alerts and events.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	n) The Management Application is also responsible of interfacing with the Common Launch Application (CLA) to perform various actions not limited to removing application icons from the selection (launch) screen when individual applications are disabled, stopped, suspended, or become unavailable for whatever reasons, or to display an appropriate general "Kiosk not available" screen when applications are disabled, stopped, suspended or unavailable. It should other messages by Operations we well.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	o) Ensuring the integrity of each Kiosk by periodically polling each Kiosk.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:

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BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	p) The Management Application web architecture allowing the management workstations to have access from anywhere in the network with different access rights.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements - CUSS Management Application:	q) Ability to communicate any Kiosk problem to the different support entities.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.11.1	System's Management Application Requirements	r) Monitoring and alarming of paper low and paper out condition on each printer on each kiosk.	1	CUSS Management Application: The platform software is responsible for managing the entire kiosks system including but and not limited to:
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.12.1	System's Common Launch Application Requirements	a) CLA application must be resumed during idle times when no other Kiosk application is active.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.12.1	System's Common Launch Application Requirements	b) The CLA must show common launch screen with all application providers' logos that have a Kiosk application registered on the Kiosk and that are currently available and selectable.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.12.1	System's Common Launch Application Requirements	c) The passenger must be able to choose the application provider's logo. This choice is reported to the Management Application, which then activates the indicated Kiosk application.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.12.1	System's Common Launch Application Requirements	d) In case of all registered Kiosk applications are unavailable, stopped, disabled, or suspended, the common launch application shall show "Kiosk not available" type of screens.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.12.1	System's Common Launch Application Requirements	e) The CLA screen shall be informative, attractive, and user-friendly.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.12.1	System's Common Launch Application Requirements	f) The Application shall be easily customized and controlled.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.12.1	System's Common Launch Application Requirements	g) The Service Provider shall allow for set-up and configuration of the CLA page for each airport at implementation.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.13.1	Key Design Considerations for the Kiosk Hardware CUSS Hardware Requirements	a) Accessibility: The Kiosks design shall be compliant with the following: i. International Civil Aviation Organization (ICAO) Document Number: Circular 274-AT/114: Access to Air Transport by Persons with Disabilities ([RD4]). ii. International Standards Organization Document Number: ISO 9999:1998: Technical Aids for Disabled Persons - Classification ([RD6]). iii. United States' Americans with Disabilities Act ("ADA") iv. SA Regulations as well v. Canada's Canadian Transportation Act and Canadian Human Rights Act. vi. United Kingdom's Disability Discrimination Act.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.13.1	Key Design Considerations for the Kiosk Hardware	b) Aesthetics: ACSA has the right to select the colour and material of the Kiosk from a wide range of choices.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.13.1	Key Design Considerations for the Kiosk Hardware	c) Branding: Kiosks may be branded in a variety of ways: i. Customized logos. ii. Customized graphics for the Common Launch component	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.13.1	Key Design Considerations for the Kiosk Hardware	d) Durability: i. The Kiosks are built from a uni-body welded design of strong, cold-rolled steel or equivalent. ii. The baked-on epoxy paint finish cleans easily and is scratch-resistant and protected against liquid splashes, dust and falling dirt. iii. The Kiosk shall have adequate ventilation for the components inside via vent openings at the rear and bottom surfaces.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.13.1	Key Design Considerations for the Kiosk Hardware	e) Flexibility: i. The Kiosk profile shall be customizable. ii. The Kiosk profile shall be expandable to allow adding any options ACSA would like to have in the future.#	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.13.1	Key Design Considerations for the Kiosk Hardware	f) Modularity: The Kiosk is based on modular components, such as standard off-the-shelf PCs, printers, and readers.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.13.1	Key Design Considerations for the Kiosk Hardware	g) Serviceability: The Kiosks are designed to allow for easy maintenance and troubleshooting. The internal components of the Kiosk are accessible via pull-out shelves. The shelves are made of durable metal with rollers and will be subjected to the following operating environment: i. Environment: Indoor, temperature-controlled. ii. Temperature Range: 10-32 degrees Celsius. iii. Relative Humidity: 20%-80%, no condensation. iv. Power: 230v/50Hz.	1	

AIRPORTS COMPANY SOUTH AFRICA

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.14.1	Workstation Hardware Specification	Workstation hardware specification shall meet or exceed the minimum requirements needed for the full 5-year service level agreement.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	a) Integrated Kiosk Enclosure	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	b) Personal Computer (PC)	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	c) Wireless network Card (802.11b/g/n)	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	d) A keyboard with an integrated Track-Point device shall be stored inside the Kiosk.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	e) Uninterrupted Power Supply (UPS)	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	f) CUSS LCD/touch screen: i. The touch screen shall be gasket to minimize the effect of dust built-up that may affect performance. ii. The touch screen shall be calibrated before delivery. iii. The screen shall be equipped with digital push-button control panel for providing adjustments of the screen contrasts, brightness, and display size.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	g) CUSS Card Reader: i. Multi-format card reader; capable of reading ISO tracks 1, 2 & 3 ii. Reading 3 track credit card information, ISO 7811/2-6 iii. Support for different smart card applications, i.e., electronic payment, and electronic signature iv. Support PC/SC standard, ISO 7816, and CT-API v. Accepting the following: magnetic cards, smart cards, frequent flyer cards, employee travel cards vi. Read the following card formats: ISO 7810, ISO 7811, ISO 7812, ISO 7813 vii. Read JIS-II formatted cards.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	h) CUSS Kiosk Passport Reader: i. The Passport Reader shall be equipped with an extended input tray to facilitate self-service operation. Read OCR A as per ISO 1073/I. ii. Read OCR B as per ISO 1073/2. iii. OCR read rate > 95%. iv. Compliant with ICAO 9303: v. Accepting: Passports, ID cards. vi. Accept Bi-directional swipe. vii. The minimum lines of OCR text supported must be at least 3. viii. The minimum characters per line of OCR text must be 45. ix. Support functionality to flag “unreadable” or “ambiguous” characters. x. Support more than 3 lines of text. xi. Support more than 45 characters per line of text.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	i) CUSS Kiosk Full page document scanner i. Automatically recognise passport and ID cards according to ICAO 9303 ii. The device shall have an integrated processor with quad optics. iii. The device shall be fast, reliable, easy to use and shall not contain any moving components based on LED technology. iv. UV illumination v. Include visible and audible indicators. vi. Resolution 400 dpi	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	j) CUSS Kiosk Bar Code Reader Flatbed barcode scanning. i. Reads BCBP with 2 Dimensional Symbols (2-D) PDF417 bar codes ii. Reads documents (tickets/boarding passes) with 1-dimensional (1-D) barcodes (code128.code39, Industrial 2 of 5) iii. Read Mobile Phone 2D (e-BCBP) barcodes (Aztec, EAN13, Datamatrix) iv. Scan rate shall be at least 35/second. v. Omni-directional scanning and decoding without any moving parts and utilises LED-based illumination.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	k) CUSS Kiosk Amplifier / Speakers: i. The audio output from the PC shall be connected to a stereo amplifier that drives two speakers mounted on the inside of the format of the kiosk. ii. Volume control is achieved through settings in the system software.	1	

AIRPORTS COMPANY SOUTH AFRICA

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	l) CUSS Kiosk Boarding Pass Printer (BPP) / General Purpose Printer (GPP): i. Capable of printing a document on boarding pass-size stock as well as many paper formats, including thin ATB that prints in "wide carriage" format on 9-inch diameter rolls. ii. Capable of printing Boarding Pass and Bag Tag documents compliant with IATA PDF 417, Aztec, QR code, Datamatrix, and fully compliant with IATA specifications. iii. Capable of printing high-quality 1D/2D barcodes. iv. Modular design uses Direct Thermal Technology with low operating and maintenance costs. v. The Printer shall be connected to the CUSS workstation through the USB and shall have the option to connect using the RS232 or directly to the IP network. vi. Print resolution requirements must be sufficient to conform to the IATA's Barcoded Boarding Pass and Bag Tag (BCBP) standard at least 203 dots/inch. vii. Minimum 5 inches/second (132 mm/second) to create the boarding pass/bag tag document. viii. The BPP shall have an on-board display(s) or indicator light(s) showing printer status, stock fill status. ix. Compliant with FCC, CE, UL.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	m) CUSS Kiosk Baggage Tag Printers (BTP): i. Capable of printing high-quality 1D/2D barcodes. ii. Including an integrated RFID module. iii. Including an integrated RFID module. iv. Compliant with IATA 1740C for high-speed RFID encoding. v. Modular design uses Direct Thermal Technology with low operating and maintenance costs. vi. The Printer shall be connected to the CUSS workstation through the USB and shall have the option to connect using the RS232 or directly to the IP network. vii. Minimum 5 inches/second (132 mm/second) to create the boarding pass/bag tag document. viii. Compliant with FCC, CE, UL.	1	
BR 3.4	BR 3.4 CUSS TECHNICAL SPECIFICATION:	BR 3.4.15.1	Minimum Kiosk Configuration Requirements - CUSS Kiosk Configurations:	n) CUSS Kiosk Input Sensors: i. The kiosk shall have the following internal sensors to monitor: 1. Door position status 2. Door-lock status 3. Coupon in output area 4. Diagnostics switch requests 5. Low paper status 6. Paper out status ii. These sensors shall be connected to an I/O controller. iii. The I/0 The I/O controller connects to a port of the PC.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.5	BR 3.5 WAN REQUIREMENTS	BR 3.5.1.1	WAN Specification	a. WAN connectivity will be provided by ACSA between ACSA sites	1	
BR 3.5	BR 3.5 WAN REQUIREMENTS	BR 3.5.1.1	WAN Specification	b. Connectivity will be provided to ALL ACSA Sites in a full mesh configuration	1	
BR 3.5	BR 3.5 WAN REQUIREMENTS	BR 3.5.1.1	WAN Specification	c. Integration from the airline Departure Control Systems (DCS) hosts into the CUPPS and CUSS cloud is required and Will NOT be provided by ACSA. The provider to provide this connectivity	1	
BR 3.5	BR 3.5 WAN REQUIREMENTS	BR 3.5.1.1	WAN Specification	d. If the bidder does not mention in the proposal any issues preventing the completing of the work as per specifications and drawings, it will be implicitly understood, for both parties, that the bidder has included the cost of overcoming these issues within his proposal.	1	
BR 3.5	BR 3.5 WAN REQUIREMENTS	BR 3.5.1.1	WAN Specification	e. The CUPPS and CUSS cloud will provide connectivity to the six satellite airports (George Airport, East London Airport, Bram Fischer Airport, Kimberley Airport & Upington Airport) via the three hub sites utilising the redundant WAN links. As provided by ACSA	1	
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.1	Network, Server storage, configuration & backup Requirements - Network points and Wi-Fi connectivity	a. The Service Provider shall specify the number of network points required per workstation.	1	
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.1	Network, Server storage, configuration & backup Requirements - Network points and Wi-Fi connectivity	b. Wi-Fi connectivity is required as a backup to physical LAN cabling. Service Provider to indicate how the workstation will be configured for ACSA Wi-Fi.	1	
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.2	Network, Server storage, configuration & backup Requirements - Server Configuration	a. Service Provider shall state what server configuration is required for the CUPPS & CUSS solution, as these need to be accommodated in the Data Centre.	1	
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.2	Network, Server storage, configuration & backup Requirements - Server Configuration	b. The stated server configuration that the CUPPS solution requires should include, but not be limited to, server specifications, gateway specifications, router and switch specifications, and any associated software required to operate and manage efficiently. The specified server configuration should be selected to operate for the full 10 years without a need for any upgrade or degradation of service.	1	
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.2	Network, Server storage, configuration & backup Requirements - Server Configuration	c. Server Storage, Backup Strategy and Data Access Security	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.2	Network, Server storage, configuration & backup Requirements - Server Configuration	d. The Service Provider shall state the server storage requirement, RAID configuration and setup if required.	1	
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.2	Network, Server storage, configuration & backup Requirements - Server Configuration	e. The Service Provider shall state the backup strategy (what must be backed up, frequency and retention period).	1	
BR 3.6	BR 3.6 IT INFRASTRUCTURE REQUIREMENTS:	BR 3.6.1.2	Network, Server storage, configuration & backup Requirements - Server Configuration	f. The Service Provider shall give details about the data access security, noting that the data security mechanism used needs to be top-end due to the sensitivity of the data that is captured.	1	
BR 3.7	BR 3.7 TESTING AND TRAINING	BR 3.7.1	System Testing and Airline Training Requirements	Unit Testing of installed equipment is the responsibility of the Service Provider to ensure all components and modules that make up the CUPPS & CUSS solution can function both as single units and as combined units forming the end-to-end solution.	1	
BR 3.7	BR 3.7 TESTING AND TRAINING	BR 3.7.2	System Testing and Airline Training Requirements	System Integration Testing of installed equipment with its associated software	1	
BR 3.7	BR 3.7 TESTING AND TRAINING	BR 3.7.3	System Testing and Airline Training Requirements	a) Integration Testing between the installed CUPPS & CUSS solution and other systems. b) Integration Testing between the installed CUPPS and flight display activation system.	1	
BR 3.7	BR 3.7 TESTING AND TRAINING	BR 3.7.4	System Testing and Airline Training Requirements	User Acceptance Testing: Airlines and Handlers are the primary users of the end solution and will, together with ACSA resources, approve and sign off on the success of UAT.	1	
BR 3.7	BR 3.7 TESTING AND TRAINING	BR 3.7.5	System Testing and Airline Training Requirements	Training of airlines & handlers' staff and other stakeholders who will be end-users/process owners of the CUPPS & CUSS solution.	1	
BR 3.7	BR 3.7 TESTING AND TRAINING	BR 3.7.6	System Testing and Airline Training Requirements	Run the project with ACSA, Airlines and any other involved stakeholders, ensuring all issues and glitches are resolved, and post-implementation support is provided	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.1	Scope Upgrade Implementation	The Service Provider shall provide an overview of the proposed equipment.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.2	Scope Upgrade Implementation	The Service Provider shall provide recommendations that must be in place prior to deployment, and this information will need to be updated with actual results upon completion of the installation.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.3	Scope Upgrade Implementation	The Service Provider shall provide 'before and after' pictorial design of the CUPPS & CUSS solution, the envisaged changes that will be made and the impact thereof on the end solution to implement these during the national rollout.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.4	Scope Upgrade Implementation	Number of tests performed at identical conditions to the project and repeatability/variance of test results.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.5	Scope Upgrade Implementation	Conditions/parameters that will remain the same as those that will prevail during the national rollout of the full CUPPS & CUSS solution. e.g., voltage required to 'power-up' equipment.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.6	Scope Upgrade Implementation	Conditions/parameters that will be different from those that will prevail during the national rollout of the full CUPPS & CUSS solution. e.g., number of passengers processed, length of time equipment is used.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.7	Scope Upgrade Implementation	The Service Provider shall indicate if there are simulation tools that predict the performance of the proposed solution.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.1.8	Scope Upgrade Implementation	The Service Provider shall provide proposed design margin/differences based upon studies and/or best practice.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.2.1	Commercial Design & Operation considerations	The Service Provider shall provide a typical scale-up strategy including providing a case-study that takes one through the steps of how CUPPS & CUSS solution was designed, data accumulation, experimental tests, construction, commissioning, full operation, and information on design vs actual capacity.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.2.2	Commercial Design & Operation considerations	The Service Provider shall present value engineering opportunities, i.e., how the expected operating capacity can be expanded through optimisation and/or minor capital expenditure.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.2.3	Commercial Design & Operation considerations	The Service Provider shall detail out quality & process control philosophy for the CUPPS & CUSS process (instruments such as spec sheets, periodic testing of equipment, quality control measures, adherence to SLA's, etc.)	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.3.1	Technology Transfer Issues	The Service Provider shall provide information on the nature of the guarantee/warranty with a focus on: (process, equipment, operating life)	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.3.2	Technology Transfer Issues	The Service Provider shall provide information on what process simulations / predictive tools the CUPPS & CUSS solution provides for optimization/trouble shooting purposes.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.3.3	Technology Transfer Issues	The Service Provider shall give a clear description to ACSA on what intellectual property rights accrue to ACSA and/or the Service Provider both during and after implementation through the entire life cycle of the equipment.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.3.4	Technology Transfer Issues	The Service Provider shall provide duration and conditions for the reliability test; this should cover at a minimum one maintenance cycle (testing the operating variability over a typical maintenance cycle).	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.3.5	Technology Transfer Issues	The Service Provider shall conduct factory acceptance testing and provide detailed tests with duly authorised sign-offs.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.4.1	Maintenance and Asset Management	The Service Provider shall provide a maintenance cost curve over the life of the equipment (1 and 5-year comparison).	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.4.2	Maintenance and Asset Management	The Service Provider shall detail what specialised training and development for maintenance staff & refresher programs do they offer, i.e., train IT Service Desk or first line support.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.4.3	Maintenance and Asset Management	The Service Provider shall provide critical spares to be kept on site, comply with the minimum quantity and replenish spares that use used withing 4 weeks	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.4.4	Maintenance and Asset Management	Spare part quantities should be specified and costed.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.4.5	Maintenance and Asset Management	The Service Provider shall present the top 5 recurring challenges/issues experienced on the solution.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.4.6	Maintenance and Asset Management	The Service Provider shall provide a List of approved Service Providers for the technology components/parts.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.4.7	Maintenance and Asset Management	The Service Provider shall share their prescribed staffing plan for maintenance and operation	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.5.1	Similarities and Differences with the ACSA Application	The Service Provider shall state how their proposed CUPPS & CUSS solution varies from other solutions already implemented.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.5.2	Similarities and Differences with the ACSA Application	The Service Provider shall provide, later during the running of the project, an Interpretation of the test work to date (expected results vs reality) and how this manifests in the design.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.5.3	Similarities and Differences with the ACSA Application	The Service Provider shall provide information on typical major uncertainties that exist & need to be further explored during the implementation and running of the project.	1	
BR 3.8	BR 3.8 IMPLEMENTATION	BR 3.8.5.4	Similarities and Differences with the ACSA Application	What are anticipated process conditions for the ACSA implementation.	1	
BR 3.9	BR 3.9 CUPPS PLATFORM REQUIREMENTS	BR 3.9.1.1	CUPPS Platform Specification	The CUPPS platform must be supported by Common Use Processing Platform Systems Technical Solution Group (CUPPS-TSG).	1	
BR 3.9	BR 3.9 CUPPS PLATFORM REQUIREMENTS	BR 3.9.1.2	CUPPS Platform Specification	The CUPPS Platform must be certified on a version of IATA Technical Specification, version 1.04	1	
BR 3.9	BR 3.9 CUPPS PLATFORM REQUIREMENTS	BR 3.9.1.3	CUPPS Platform Specification	The CUPPS solution must comply with the IATA Recommended Practice (RP) 1797	1	
BR 3.9	BR 3.9 CUPPS PLATFORM REQUIREMENTS	BR 3.9.1.4	CUPPS Platform Specification	The CUPPS implementation must include appropriate hardware, software, firmware, as well as peripheral support as defined in the CUPPS Technical Specification.	1	
BR 3.9	BR 3.9 CUPPS PLATFORM REQUIREMENTS	BR 3.9.1.5	CUPPS Platform Specification	CUPPS platform suppliers must complete rigorous independent third-party testing with a Compliance Testing Entity (CTE) to ensure platform technical compliance with the CUPPS Technical Specification	1	
BR 3.9	BR 3.9 CUPPS PLATFORM REQUIREMENTS	BR 3.9.1.6	CUPPS Platform Specification	CUPPS platform supplier must be able to upgrade the platform in conformity with the CUPPS Release Cycle policy in order to remain consistent with the Technical Specification.	1	
BR 3.9	BR 3.9 CUPPS PLATFORM REQUIREMENTS	BR 3.9.1.7	CUPPS Platform Specification	The solution must be in line with the latest CUPPS technology	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.1.1	CUSS Platform Specification	The CUSS platform must be supported by Common Use Self Service Technical Solution Group (CUSS-TSG)	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.2	CUSS Platform Specification	The CUSS platform must be certified on a version of IATA Technical Specification, version 1.5.1	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.3	CUSS Platform Specification	The CUSS solution must comply with the IATA Recommended Practice (RP) 1706c	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.4	CUSS Platform Specification	The CUSS platform shall support multi-lingual capabilities, including English and other languages	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.5	CUSS Platform Specification	The CUSS platform shall include application and system monitoring sensors and tools that will provide automatic alerts and warnings to central (internal and external) monitoring systems	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.6	CUSS Platform Specification	The CUSS platform must support multiple airlines	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.2.1	CUSS Device Signage	The Service Provider must install clear and visible signage to guide passengers to the locations of the CUSS (Common Use Self Service) check-in devices	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.2.2	CUSS Device Signage	All signage aligning with ACSA branding guidelines, as advised by ACSA Corporate Services upon appointment of the service provider.	1	
BR 3.10	BR 3.10 CUSS PLATFORM REQUIREMENTS	BR 3.10.2.3	CUSS Device Signage	The CUSS device must be accessible, informative, brand-consistent, and compliant with all applicable regulatory standards.	1	
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.1	Project Management Approach	a) 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 b) 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.	1	
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.2	Define Project Team	a) The project manager must be able to define a group of people responsible for executing the tasks and producing deliverables outlined in the project plan and schedule.	1	
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.3	Resource Planning	a) The project manager must be able to determine what resources are required to deliver projects and then allocate and schedule the work based on team capacity b) The project manager must be able to define a group of people responsible for executing the tasks and producing deliverables outlined in the project plan and schedule.	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.4	Define Project Plan	a) Provide project definition and plan, identify major critical milestones, ensure delivery within budget and project deliverables aligned and approved by the ACSA Project Manager. b) Provide, maintain, and update detailed project planning, and identify critical path dependencies. c) Approve project plan, critical milestones, budget forecast, and project deliverables d) Schedule and facilitate weekly project meetings to review the detailed project plan and critical path dependencies e) Manage an integrated baselined project schedule, which will include all ACSA and third-party tasks and all known dependencies. i. Project schedule to include all project milestones, including billing milestones. ii. Project schedule to be baselined within the first four weeks of project kick-off. Any changes to the baseline are to be presented to the project board for review and approval	1	
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.5	Stakeholder Management	a) The project manager must be able to do stakeholder identification, analysis, and management to ensure alignment, secure support, identify risks, enhance decision-making, foster communication, facilitate adaptation, and contribute to the organisation's reputation.	1	
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.6	Project Governance	a) The project manager must be able to enforce project governance to ensure adherence to the procedures and policies that determine how projects are managed and overseen. b) Draft project charter with input from ACSA for sign off by all stakeholders c) Complete all required project artefacts, and ensure approval through required forums and stakeholders, which may include, but are not limited to, solution design, test plans, integration plans, migration plans, change controls, communication plans, decommission plan, asset management forms d) All project documentation to be saved in the ACSA central document repository e) Minute all meetings within 48 hours of the meeting, list all actions from the minutes in the RAID log f) Include end-to-end asset management requirements aligned to ACSA policy and procedure in the scope of deliverables – this includes asset tagging of ALL assets, completing the asset capitalisation form and submitting such forms with invoices to enable payment	1	
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.7	Project reporting	The project manager must provide weekly project reports, and monthly Steerco reports to the project board in ACSA format.	1	
PMR4.0	PMR4.0 Project Management Requirements	PMR 4.1.8	Project Close Out	The project manager must ensure that all activities required to close out the project are carried out to ensure that the project is properly closed out and seamlessly handed over to operation without incomplete activities.	1	
CM 5.0	CM 5.0 Change Management Requirements	CM 5.1	Change Management	The Service Provider shall follow ACSA change management processes and procedures at all times	1	

BR Category	BR Description	BR #	Sub Area	Requirement Description	Priority	Comments/Notes
CM 5.0	CM 5.0 Change Management Requirements	CM 5.2	Change Management	The Service Provider shall ensure that all relevant stakeholders are apprised of all changes during the project	1	
CM 5.0	CM 5.0 Change Management Requirements	CM 5.3	Change Management	The Service Provider shall co-operate with the ACSA Digital Change Manager to ensure that change management activities are implemented during the project implementation to ensure that all relevant stakeholders are engaged, and post project implementation to ensure that the system has been fully adopted by all relevant stakeholders.	1	

Table 1: Business Requirements

AIRPORTS COMPANY SOUTH AFRICA

4 Implementation Service Level Agreements:

PMR 6.1	Implementation SLA			
Service category	**Performance standard**	**Method of measurement**	**Target**	**Penalties**
Delivery to schedule	Provision of the service in accordance with the requirements contained in the project specifications	Damages for the late completion of the whole service are measured per day from the start until the completion date. Any foreseen delays are to be communicated timeously, noting any impact (quality or cost) and presented to the Project Board in order to rebase the schedule, to avoid delay scheduling and penalties thereof. Any delays by ACSA or Third parties to be recorded and communicated timeously to avoid impact to the delivery schedule	100% delivery of the full services within the allocated projected implementation date (i.e. go-live date)	The provider will pay delay damages for late completion of the whole service at 0.05% per day up to a maximum of ten percent (10%) of the value of the delayed services

Table 2: implementation SLA

5 Solution Bill of Quantities

5.1 General notes

Below is the Quantities that the Service Provider must quote on. Note that full costing must be done for all the Quantities, however the execution will be done as and when needed depending on the life cycle of current equipment and capacity needs.

During the initial contract initiation a full assessment will be done to determine the final rollout plans.

5.2 Life Cycle

As the service period is 10 years, the costing must also incorporate any Lifecyle replacements during the period. For all equipment supplied. This must also include any Servers, gateways, routers, switches, storage systems etc quoted for. The Pricing Workbook makes provision for this.

5.3 Capacity increases

Again due to the length of the services (10 years) additional capacity must be catered for over the period. A 10% growth should be added in year 4 and an additional 10% in year 8. This requirement is included ion the pricing workbook

5.4 Spares quantity

Spares quantities listed below is a minimum required, however the provider must use their own discretion to increase this if required to meet the SLAs as required. The Service Provider must ensure that the minimum spares quantity are replenished should spares be used within 4 weeks.

AIRPORTS COMPANY SOUTH AFRICA

5.5 Solution Bill of Quantities

EQUIPMENT	JHB Online	JHB Spares	CPT Online	CPT Spares	DUR Online	DUR Spares	PLZ Online	PLZ Spares	GRJ Online	GRJ Spares	ELS Online	ELS Spares	BFN Online	BFN Spares	KIM Online	KIM Spares	UTN Online	UTN Spares
CUTE Workstation	464	46	212	21	133	13	33	3	19	2	23	2	15	2	9	1	14	1
LCD Monitor	464	46	212	21	133	13	33	3	19	2	23	2	15	2	9	1	9	1
Boarding Pass Printer (BPP)	397	40	174	17	102	10	27	3	19	2	19	2	12	1	9	1	11	1
Magnetic Stripe Reader (MSR) & Optical	458	46	204	20	133	13	33	3	19	2	23	2	15	2	9	1	14	1
Bag Tag Printer (BTP)	397	40	169	17	102	10	27	3	19	2	19	2	12	1	9	1	6	1
Boarding Gate Reader (BGR)	116	12	58	6	48	5	12	1	6	1	8	1	6	1	4	1	8	1
Laser Scanner Reader (LSR)	317	32	144	14	72	7	21	2	13	1	15	2	9	1	5	1	5	1
General Purpose Printer (GPP)	83	8	37	4	29	3	6	1	6	1	4	1	3	1	2	1	2	1
CUSS Kiosks	44	1	22	1	19	1	6	1	4	1	4	1	3	1	2	1	2	1

Table 3: 5.5 Solution Bill of Quantities

6 Information Security Standards:

Information Security has prescribed **Web Application Security Standards** to which all ACSA web-based applications need to adhere. For a high-level overview of these security standards, please refer to **ANNEXURE - B.**

7 IT Standards:

ACSA IT Infrastructure has prescribed **IT Standards** to which all ACSA web-based applications need to adhere. A detailed **Annexure D-IT Standards** will accompany this document to SCM for bidder's reference.

8 Service Management, Preventive and Corrective Maintenance requirements

ACSA has prescribed **Service Level Agreements** to which a successful Service Provider needs to adhere during and post-project implementation (support & maintenance), until the end of the contract.

9 AIRLINES CURRENTLY UTILIZING ACSA FACILITIES:

The following airlines are currently utilising ACSA airport facilities and will/may be utilising the upgraded CUPPS and CUSS system, dependent on their DCS being certified on the CUPPS platform. The list in not exhaustive, and the Service Provider shall accommodate all other airlines that might not be included on the list.

AIRLINE	CODE
AIR BOTSWANA	BP
SINGAPORE	SQ
TURKISH	TK
MALAWI	3W
QATAR	QR
LUFTHANSA	LH
SWISS	LX
LAM-LINHAS AEREAS DE MOCAMBIQU	TM
DELTA	DL
AIR PEACE	P4
ANGOLA	DT
VIRGIN	VS
BRITISH AIRWAYS	BA
AIR AUSTRAL	UU
UGANDA AIRLINES	UR
KENYA	KQ
AIR SEYCHELLES	HM
ROYAL ESWATINI	RN
AIR CHINA	CA
AIR ALGERIA	AH
AIR ZAMBIA	ZN
LAN	LA
AIR TANZANIA	TC
AFRIJET/AIR GABON	J7
ETHIOPIAN AIRLINES	ET
FASTJET	FN
AIR COTE D' IVOERE	HF
AIR MAURITIUS	MK
AIR FRANCE	AF
KLM	KL
QANTAS	QF
EGYPT AIR	MS
AIR ZIMBABWE	UM
EMIRATES	EK
RWANDAIR	WB
ETIHAD AIRWAYS	EY
UNITED AIRLINES	UA
PROFLIGHT	P0
AIR CONDOR	DE
WESTAIR AVIATION	WV
CATHEY PACIFIC	CX
SOUTH AFRICAN AIRWAYS	SA
ASKY	KP
AIRLINK	4Z

AIRLINE	CODE
FLYSAFAIR	FA
GLOBAL AIRWAYS (LIFT)	GE
CEMAIR	5Z
COBRA	0C
EDELWEISS	WK

Table 4: Airlines Currently Utilizing ACSA Facilities

10 APPLICABLE LAWS, CODES, RULES, REGULATIONS AND STANDARDS:

a) The development and installation work required for the upgrade shall comply with the System Requirements.

b) Specification, referenced rules, regulations, codes, standards, as well as industry best practices for each system in a “greenfield” airport the capacity and size planned for INA.

The following are Codes and Standards that shall be referenced:

Standard / Code	Purpose / Function
ISO 9000	Quality Assurance
IEC 62381	Automation Systems Testing
IEC 60529	Degree of enclosure protection (IP Code)
ISO 29119	Software Testing
ISO 27001	Information Security Management
BS 7925-1 & 2	Software Testing Terms
IEEE 829	Software Test Documentation
IEEE 1028	Software Review Procedures
IEEE 1044	Classification of Software Anomalies
ISO 9002	Quality Control Plan and Requirements
AEA	Association of European Airlines i. ATB Technical Specifications –Amended Aug 2020, 2008, 2009 and later. ii. Parametric Baggage Tag Data Concept – Aug 2002, 2008, 2009 and later iii. Self-Service Specifications Aug 2001 and later
IATA	International Air Transport Association i. CUSS Technical Specifications 1.3 Jun 2013 ii. IATA RP 1797: Common Use Terminal Equipment (CUPPS) Systems iii. IATA RP 1745: Baggage Service Messages iv. IATA 1722c, 722c, 722d, 722e: ATB related resolutions v. IATA RP 740, 740a: BTP related resolutions vi. IATA RP 1706c, 1706d, 1706e: Common Use Self-Service vii. Airport Handling Manual (16th Edition) viii. Airport Development Reference Manual (9th Edition)
ICAO	International Civil Aviation Organization i. Annex 14 ii. ICAO: Annex 10 to the Convention on International Civil Aviation. - "Aeronautical Telecommunication" - Volume II - 4.4.2 (IA2), 4.4.15 (IA5) iii. Annex 17th – 7th Edition April 2002 Including Amendments, Security Safeguarding International Civil Aviation Against Acts of Unlawful Interference
EIA	i. EIA-310-D (1992): Cabinets, Racks, Panels, and Associated Equipment

Standard / Code	Purpose / Function
	ii. TIA/EIA-568-B: Commercial Building Telecommunications Cabling Standard
ITIL v3	i. IT Service Management

Table 5: Codes and Standards

11 Information Security Standards:

The list below outlines a high-level overview of the Web application Security Standards. A detailed **Information Security**: **Web application Security Standards** document will accompany the requirements scope of work document to SCM for procurement purposes:

High-Level Overview

1. Classification of controls
    i. Architecture and Design Requirements
    ii. Authentication verification requirements
    iii. Session management requirements
    iv. Malicious input handling verification requirements
    v. Cryptography verification requirements
    vi. Error handling and logging verification requirements
    vii. Data Protection Verification Requirements
    viii. Communications security verification requirements
    ix. HTTP security configuration verification requirements
    x. Files and resources verification requirements
    xi. Mobile application security verification requirements
2. Accountability and Responsibility
3. Process for Monitoring
4. Accountabilities and Responsibilities
5. Accountabilities
6. Reporting of Non-Conformance
7. Related Policy Documents
8. Related Legislation and Standard
9. Change Control and Verification
10. Records

12 SERVICE MANAGEMENT, PREVENTATIVE AND CORRECTIVE MAINTENANCE:

ACSA has prescribed Service Management, Preventative and Corrective Maintenance requirements to which all solutions must adhere. A detailed **Annexure B-Service Management, Preventative and Corrective Maintenance** document will accompany the requirements scope of work document.