

PORT OF NGQURA CONTAINER TERMINAL

Document Title:

SCOPE OF WORK

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**TO SUPPLY AND INSTALL AND COMMISSION OF A NEW TRITON
TURNSTILE AT ADMINISTRATION BUILDING**

- BACKGROUND

The Port of Ngqura has installed Triton full-height curved glass turnstiles since its inception in 2009. As the terminal has grown, it has become necessary to increase the number of turnstiles to handle the current movement of our employees, customers, suppliers, and contractors.

The triton full height is designed to be a high security and aesthetic access control solution and has a 10-year guarantee from the manufactory.

Our turnstiles are connected to XMP-Babylon readers, which serve as the control system for integrated facility management. This system features a comprehensive and unique graphical user interface, facilitating the visualization and control of the company's security system.

- CURRENT SITUATION

There is currently no active contract to supply and install the Triton full-height turnstile system. It is preferable that Transnet Port Terminal invites accredited suppliers to supply, install, and commission a new turnstile.

- PURPOSE

To invite a suitable contractor or supplier to supply, install, and commission the new Triton full-height turnstile system at the administration building.

- REQUIREMENTS

- The successful supplier must be registered in terms of the Private Security Industry Regulation Act 56 of 2001. It is of fundamental importance that the supplier complies with this act, as the XMP-Babylon system forms part of the access control instruments that grant access to property.
- The act compels suppliers or registered companies to achieve and maintain a trustworthy and legitimate private security industry, acting in accordance with the principles contained in the Constitution and other applicable laws. This ensures greater safety and security in the country and that all security service providers act in the public and national interest.
- Additionally, the supplier must be accredited by the OEM to work on the Babylon system, providing proof of recognition by the OEM.

- DURATION OF CONTRACT

- It's a once off service

- CIVIL WORK

- A site meeting will be compulsory for measurements and insight of what we want to do. This including the glass or structure will required to be removed prior the

installation.

- PERFORMANCE REQUIREMENTS

It is imperative that the awarded supplier considers the terminal's 24-hour operation. Therefore, the movement of people must be minimized to ensure adherence to the agreed-upon times.

- APPLICATION

- The suited for applications requiring high volume access and high levels of security. Use extensively in application such as office reception areas, commercial building, and universities.

- The designed is for interior installation and harsh operating conditions.

- CONFIGURATION

- To integrate the Triton Full Height Turnstile with the Babylon system and ensure it can retrieve movement and access clocking data for each person, as well as integrate with the fire emergency system;

- Integration with Babylon System:

- Access Control: Ensure the turnstile is compatible with the Babylon system's access control protocols. This typically involves configuring the turnstile's software to communicate with Babylon's database to log entry and exit times.

- Data Retrieval: Set up the turnstile to send real-time data to the Babylon system. This might require custom APIs or middleware to facilitate data exchange (to consider our currently system has been configured, therefore re connecting)

- Fire Emergency System Integration:

- Fail-Safe Mechanism: Configure the turnstile to unlock automatically in the event of a fire alarm. This ensures that all individuals can exit the premises quickly and safely.

- Alarm Integration: Connect the turnstile to the building's fire alarm system. When the alarm is triggered, the turnstile should receive a signal to switch to an emergency mode.

- Technical Specifications:

- Bi-Directional Operation: The Triton turnstile supports bi-directional operation, which is essential for both entry and exit logging¹.
 - Programmable Logic: Utilize the turnstile's programmable logic to customize its behavior according to the specific requirements of the Babylon system¹.
 - Safety Features: Ensure the turnstile's anti-trap and anti-reverse systems are active to prevent accidents during emergencies¹.

- Installation and Testing:

- Professional Installation: Have the turnstile installed by professionals to ensure all integrations are correctly implemented.
 - Testing: Conduct thorough testing to ensure the turnstile works seamlessly with both the Babylon system and the fire emergency system.

- SCOPE OF WORK

- Rotalok rotation locking mechanism
- It fitted to all triton full height turnstile
- Ultra-heavy-duty electromechanical rotation locking mechanism.
- Bi-directional operation
- Designed by professional engineers.
- Tried, tested, and perfected over a period of over 20 years.
 - Reliable Technology
- Self-centering rotation system – rotor return to starting position after every rotation.
- Anti-trap safety system – no mid-rotation locking or trapping in the event of a power failure.
- Extra secure 60-degree anti- reverse system.
- Programmable PLC logic with user diagnostic features.
- Mechanical Key override – clockwise and anti-clockwise directions (fail-secure)
 - Durable
- Zinc plated for corrosion resistance.
- Ultra-quiet, buffered solenoids and pawls.
- Solenoids rated for 100% duty cycle
- Case hardened locking disk and pawls – eliminating any wear.
- All setting must be factory setting, no adjustment.
- No routine maintenance whatsoever, ever, this is factory quarantine.

- Guaranteed Manufactured to last
- Year mechanical guarantee
- 1-year electrical guarantee.

- Technical specifications
- Power 220 Volt AC
- Frequency 50Hz / 60Hz
- Power consumption 50W
- Solenoid voltage 24 Volt DC
- Logic voltage 24-volt DC
- Diameter 1600mm wide factory standard.
- Rotor wing configuration 3 wings 120 degree
- Form curved
- Rotor glass wings 8mm toughened glass
- Frame glass infill 6mm toughened glass
- Push handles stainless steel.
- Lighting 2 low -voltage downlights.
- Pressure Mat combination of steel plates and foam covered by carpet indicating no entry.
- Design: modular bolt together designs for ease of transport and installation; components must be able to pass through the standard door.
- System integration with all access control and time and attendance system.
- Unlocking for entry and exit rotation controlled through normally open dry contact.

- Transaction / rotation complete output.
- Integral wireways with draw wires in place, no exposed wires.
- the top of the turnstile must be covered with stainless steel to minimise dust into the electronic components.
- To provide two Babylon readers that will be integrated into the Babylon system.
- Accessory biometric / fingerprint reader mounted bracket
- NB:
- Triton full height turnstile



NB:

SIGN-OFF BY REQUESTING DEPARTMENT

	NAME & SURNAME	DATE	SIGNATURE
COMPILED BY			
APPROVED BY			