


## **DURBAN CONTAINER TERMINAL PIER 1**

### **Scope of Work**


**UPGRADE OF CCTV SYSTEM AND ADDITIONS FOR TRANSNET SOC LIMITED,  
OPERATING AS TRANSNET PORT TERMINALS (FROM NOW ON REFERRED TO  
AS "TPT") FOR DURBAN CONTAINER TERMINAL, PIER 1.**

### **REVISION 01:**


## COMPILED BY

Name	Title	Signature	Date
Barileng Pule	Security Manager		09/04/2025

## REVIEWED BY

Name	Title	Signature	Date
Nosibusiso Cele	(Acting) ICT Manager		29/04/2025

## APPROVED BY

Name	Title	Signature	Date
Nopasika Selane	Terminal Manager		30.04.2025

## RECEIVED BY

Name	Title	Signature	Date
BP Sibongile Dlamini	Regional SCM (Acting)		

## **SCOPE OF WORK**

### **1. BACKGROUND**

Transnet Port Terminal (TPT) Durban Container Terminal is in the process of upgrading the CCTV system.

This specification details the requirements for purchasing and installing additional CCTV cameras within the empty stack area, ops centre server room Area, main gate area, **EES Building Wash Bay, Grave yard, stores & reception areas**, and the TNPA main gate area, Blue canopy area, Pier 1 Ingate Lanes area, 107 Entrance Gate area, Pier 1 railway gate area, **108,104,105,102 & 101 Quayside / waterside** area, IVS staging areas, Bhekulwandle building, parking area, Bhekulwandle staff facility parking, old ops centre side parking area, back of old ops centre, truck outgate area .

The CCTV system is composed of:

- Software; and
- Hardware (including cameras)

### **2. ACRONYMS AND ABBREVIATIONS**

<b>Acronym/ Abbreviation</b>	<b>Designation</b>
<b>DCT</b>	Durban Container Terminal
<b>CCTV</b>	Closed Circuit Television
<b>TPT</b>	Transnet Port Terminals

### **3. OVERVIEW**

- 3.1 The *Contractor* will be expected to supply a copy of its Occupational Health and Safety plan and its employees must comply.

### **4. CONTRACTOR REQUIREMENTS**

- 4.1 All potential bidders are to be registered as Security Service Providers with the Private Security Industry Regulatory Authority (PSIRA). Please provide proof of registration.
- 4.2 All potential bidders must be approved by Hikvision software integrators. Please provide proof of such from the OEM.
- 4.3 The scope includes the installation of additional cameras. In this regard, existing fixtures must be used as far as possible, and new ones supplied where none exist.

- 4.4 The *Contractor* shall supply all materials, labour, supervision, and tools to complete the installation.
- 4.5 Any new equipment that needs to be supplied shall be per the Transnet standard. Where the operational requirement in this document deviates from the Transnet standard, the deviation will apply due to operational realities. These deviations will be agreed to at the site meetings held with the Transnet representative.
- 4.6 The *Contractor* shall supply all materials, labour, supervision, and tools to ensure a complete and operable system per this scope of work, the contract document, and project requirements.
- 4.7 Items not specifically stated in the specifications but essential to the proper completion of the work shall be furnished and installed as part of the system.
- 4.8 The *Contractor* shall be held responsible for any incorrect installation of any of the equipment.

## 5. User requirement:

### 5.1 Upgrade of existing CCTV system

- 5.1.1 The *contractor* is to make the following new additions to the existing PIER 1 CCTV system:
- 5.2 Purchase and install seventeen (17), TandemVu cameras.
- 5.3 Purchase and install one (01), standard PTZ cameras.
- 5.4 Purchase and install eleven (11) Static Panoramic cameras.
- 5.5 Purchase and install twenty-nine (29) static ColourVu Bullet cameras.
- 5.6 Purchase and install thirteen (13) static Dome cameras.
- 5.7 Purchase and install Four (04) static Varifocal cameras.
- 5.8 Purchase and install thirteen (13) static Number Plate cameras.
- 5.9 Each item should appear as separate lines on the quote submission and be as detailed as possible.

- 5.10 Install 12 x wireless devices (WD) to connect to Pier 1 cameras. Currently there is no network connectivity in this area (main gate area - fibre at the guard house. Ops Centre area electrician to sort power), EES building wash bay – electrician to supply 20m power cable and EES graveyard – electrician to check power. Waterside key side substation 102 there is a Pole and no power – electrician to sort out the power. And a cherry picker is needed for the project.
- 5.11 56 x static cameras installed, 24 of which are currently inoperable due to power and network connectivity-related faults.
- 5.12 Each item should appear as separate lines on the quote submission and be as detailed as possible.
- 5.13 It is preferred that CCTV security installation companies be used for this project.
- 5.14 **NB: Any deviation from the scope needs to be authorised before the work is performed. However, TPT can only pay for what was quoted and signed off on.**

Legend of abbreviations	
S	Static camera
SP	PanoVu (180 °)
D	Static dome
P	PTZ camera
TP	TandemVu PTZ
LPR	License plate recognition
WD	Wireless device
CB	Camera box
CP	Camera pole

## 5.15 WIRELESS DEVICES

5.15 Install 12 x wireless devices (WD) to connect cameras to areas that have no network connectivity i.e TNPA Main gate, 105 Waterside, 104 Waterside, 108 Waterside (Subject to approval of fiber/ network connectivity repairs).

## 6. MAINTENANCE AND SUPPORT

- 6.1 The *Contractor* is to provide a cost for the servicing and cleaning of the system to bring the DCT CCTV system to a fully functional state. There are currently:

TRANSNET PORT TERMINALS	Waterside, Landside & Reefer Yard CCTV Systems upgrade				DURBAN TERMINALS – DCT Pier 1
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6.1.1 56 x static cameras installed, 24 of which are currently inoperable due to power and network connectivity-related faults.

6.2 The maintenance and support must include the following:

Legend of abbreviations	
S	Static camera
S(D)	Static dome
P	PTZ camera
WD	Wireless device
UPS	Uninterrupted power supply
NVR	Network video recorder
HD	Hard drive
SP	Steel pole
CB	Camera box

AREA	EQUIPMENT REQUIRED	QUALITY	COMMENTS
	Hikvision 64 Channel NVR 8 SATA	1	
	10TB HDD	4	
Empty stack Pole 1	TandemVu PTZ	1	Existing box requires Hasp N staples & locker
	POE Injector	1	
	Rack 4 Port Switch poe with 2 uplinks	1	
Empty stack Pole 2	TandemVu PTZ camera 200m	1	
	Wireless connectivity nano station	1	
	Rack 4 port switch 2 uplinks	1	
	Hasp N Staples and a locker	1	
	Fibre Converter	1	
OPS Centre server room	16 Port POE Switch required	1	Electrician to sort out power
		1	Civil work required during installation

SCOPE OF WORK

	ANPR Number Plate Recognition	1	
	4MP ColourVu Bullet Camera	8	
	4MP Dome Darkfighter Camera	1	
	Orange Box	1	
	Hasp n Staples + locker	1	
	5m Square Tube Pole with base plate	1	
	Rack 4 port Poe Switch	1	
	Fibre Converter	1	
Main Gate	6m Square Tube Pole	1	
	TandemVu PTZ Camera 200 m	1	
	PTZ POE Injector	1	
	ANPR Number	2	
	4MP IR Dome Dark fighter Camera	1	
	3m Square Tube Poles	2	
	Rack 4 port Poe Switch	1	
	Fibre Converter	1	
EES Building Wash Bay	TandemVu PTZ Camera 200 m	1	Electrician to supply a 20m Power Cable
	PTZ Poe Injector	1	
	PTZ Mount Bracket	1	
	Cat 6e Cable	1	
EES Grave Yard	PTZ Camera Standard 150m	1	Electrician to check Power on existing Pole
	PTZ POE Injector	1	
	Wireless Connectivity Device	1	
	Hasp N Staples + Locker	1	
	Fibre Converter	1	
EES Stores	4MP ColourVu Bullet Camera	4	
	Standard 150m PTZ Camera	1	
	PTZ POE Injector	1	
	Mount Bracket	1	
	Orange Box	1	
	Fibre Converter	1	
EES Building Reception	16 Port Poe switch	1	
	4MP IR Dome Dark fighter Camera	1	
TNPA Main Gate	TandemVu 200m PTZ	1	

SCOPE OF WORK

	Camera		
	PTZ POE Injector	1	
	PanoVu (180 degrees) Camera	1	
	Wireless Connectivity Device	1	
	Hasp n Staples + Locker	1	
	Fibre Converter	1	
Blue Canopy	TandemVu PTZ Camera 200 m	2	
	POE PTZ Injectors	2	
	8 Port Switch with 2 uplinks Gib each port	1	
	Wireless Connectivity Device	1	
	3m Square Tube Pole	1	
	Fibre Converter	1	
Pier1 Ingate Lanes	8 port Switch POE with 2 uplinks GIB each port	1	
	4MP ColourVu Bullet Cameras	6	
	PanoVu (180 degrees) Cameras	2	
	Fibre Converter	1	
107 Entrance Gate	4MP ColourVu Bullet Cameras	2	
	4 Port Switch with 2 uplinks 1 GB each Port	1	
	TandemVu PTZ Camera 200 m	1	
Pier 1 Railway Gate	TandemVu PTZ Camera 200 m	1	
	POE PTZ Injector	1	
	4 Port Switch with 1 GB each Port	1	
108 Quayside/Waterside (Corner Area )	TandemVu PTZ Camera 200 m	1	
	POE PTZ Injector	1	
	Wireless Connection Device	1	
	4 Port Switch with 1 GB each Port	1	
	Fibre Converter	1	
104 Quayside/Waterside	TandemVu PTZ Camera 200 m	1	
	POE PTZ Injector	1	



SCOPE OF WORK

	Wireless Connection Device	1	
	4 Port Switch with 1 GB each Port	1	
105 Quayside/Waterside (Corner)	TandemVu PTZ Camera 200 m	2	
	POE PTZ Injector	2	
	Wireless Connection Device	1	
	4 Port Switch with 1 GB each Port	1	
	Fibre Converter	1	
102 Quayside/Waterside Substation (Middle Pole) Area	TandemVu PTZ Camera 200 m	2	No Power and the Electrician to sort out Power
	POE PTZ Injector	2	
	Wireless Connection Device	1	
101 Quayside/Waterside	TandemVu PTZ Camera 200 m	1	
	POE PTZ Injector	1	
	Port Switch with 1 GB each Port	1	
	Wireless Connection Device	2	
	Hasp n Staples + Locker	1	
	Fibre Converter	1	
IVS Staging Cubicles Area	TandemVu PTZ Camera 200 m	1	
	PTZ POE Injector	1	
	4 Port Switch with 1 GB each Port	1	
	Standard 150m PTZ Camera	1	
	PTZ POE Injector	1	
	Orange Box	1	
IVS Staging Area	TandemVu PTZ Camera 200 m	1	
	PTZ POE Injector	1	
	Standard 150m PTZ Camera	1	
	PTZ POE Injector	1	
	Wireless Connection Device	1	
	Fibre Converter	1	
Bhekulwandle Building	TandemVu PTZ Camera	1	

SCOPE OF WORK

	200 m		
	POE PTZ Injector	1	
	PanoVu (180 degrees) Cameras	6	
	4MP IR Dome Dark fighter Camera	10	
	4MP ColourVu Bullet Cameras	4	
	Fibre Converter	1	
Parking Area	Vari Focul ColourVu +Cameras. (General Overview)	4	
	3M Square Poles	4	
	Nano Stations	2	
	4 Port Switch	3	
Bhekulwandle Staff Facility Parking Entrance and Exit Area	ANPR Number Plate Cameras	2	
	2m Square Tube Poles With base plates	2	
Old OPS Centre Side Parking Area	4MP ColourVu Bullet Cameras	2	
	ANPR Number Plate Cameras	2	
	3m square Tube Pole	3	
Back OPS Centre Building	PanoVu (180 degrees) Cameras	1	
	4MP ColourVu Bullet Cameras -Back Court Yard	1	
	4 Port Switch for Back Court Yard	1	
Truck Outgate Area	ANPR Number Plate Cameras	3	
	8 Port Switch	1	
100 Emphy Stack Area	TandemVu PTZ Camera 200 m	1	There is an existing 6M Pole With a standard 150M PTZ
	12m Pole square Tube Galvanized	1	
Empty Stack Area ( Next to the Toilet Parkhome)	TandemVu 200m PTZ	1	There is an Existing standard 150M PTZ
	PTZ POE Injector	1	
Bhekulwandle Staff facility parking Entrance & Exit	Number Plate Camera .	2	
	3M Pole in the middle	3	
	Orange Boxes	3	
	4 Port Switch	3	

Back Court Yard Area	PanoVu (180 degrees) Cameras	1	
	4 Port Switch	1	

#### Total Number Of Cameras:

TandemVu Cameras – 17

Standard PTZ - 1

Static Panoramic Cameras – 11

Static ColourVu Bullet Cameras – 29

Static Dome Cameras – 13

Static Varifocal Cameras – 4

Static Number Plate Cameras – 13

6.2.1 Replace all fixed cameras at Pier 1 Terminal which are currently not working.

6.2.2 Installation of a Hasp N staples locker to existing box

6.2.3 Electrician to sort out the power issue and supply a 20m power cable.

6.2.4 Electrician to check power on existing poles

6.2.5 Existing fibre confirmed at the Main gate Guard house

6.2.6 Maintenance of 56 cameras; 24 of which are currently inoperable due to power and network connectivity faults. Maintenance must include the cleaning and refocusing of cameras that are out of focus.

6.2.7 Install an expendable Network Video Recorder capable of handling over 64 channels. This unit is to be installed in the Bhukulwandle Building Server Room.

6.2.8 Purchase and install more than 100 TB storage capacity into the new NVR system to allow for recording to be accessible for a minimum period of 45 days.

6.2.9 Install surge protection for all new devices installed.

### **6.3 Additional requirements:**

6.3.1 CCTV software must adhere to security protocols in place on the TPT network in terms of SNMP data packets as well as bandwidth. The supplier may need to consult with LT regarding this item.

- 6.3.2 Where existing cameras are not compatible with the software solution supplied – the firmware upgrade or camera replacement must be included in the quote.
- 6.3.3 Formal Certification Training (SASSETA and/or OEM Accredited) is to be provided to security CCTV operators, and Practical Skills is to be transferred to the ICT Support Team.
- 6.3.4 The placement of these cameras will be shown during the site visit. These cameras are to be connected via fiber connection to the existing Server Room system. Any new cables that are to be installed, must be within cable trunking.
- 6.3.5 Ensure all PoE switches are in a fully enclosed and secured housing that has sufficient ventilation as well as ensuring that minimal dust enters. The warranty on the above additions needs to be stipulated as well as the warranty on the UPS devices and the new cameras need to be stated. The warranty needs to include for the bidder to come and repair any of the work while under the warranty period.
- 6.3.6 It is recommended that the bidder include in the quote any additional equipment to be used during the installation process. This may include the hiring of man lifts etc to reach the higher areas.
- 6.3.7 The upgrade must include work such as re-adjusting the views of the camera and adjusting and securing the cameras to ensure maximum coverage and insulation of all exposed wiring at the LAN connection points.

## **7. Installation of a professional Centralised CCTV Monitoring System**

- 7.1 To archive central configuration and management of all CCTV cameras, the bidder is required to install a comprehensive central management CCTV monitoring system. The aim is to manage multiple security systems from a single point of command and control. The systems must be managed through a graphical user interface thereby reducing operational costs.

- 7.2 The *contractor* must purchase and install a minimum of '**50 lifetime Licences**' with one-time purchase and support, which will remain free thereafter.
- 7.4 The *contractor* must also set up auto patrol on all PTZ cameras in line with operational requirements. The details of which will be discussed with the winning bidder, at the start of the project.
- 7.5 **Please note: Site meeting is compulsory. A handover documentation pack is required and must contain all the information regarding the newly installed components, serial numbers, and warranty certificates for all components under warranty. Maintenance and user documentation for new equipment to also be provided as part of the handover pack. A sign-off sheet between the bidder and TPT representative upon completion must also be included as part of the handover pack.**

## 8. **TECHNICAL EVALUATION CRITERIA**

- 8.1 Please note that if a bidder does not meet the minimum eligibility criteria, the bid will be disqualified. Please submit the below documents/ information as part of the returnable pack. Please ensure that for any declarations/ commitments/ letters, the bidder uses their company letterhead.

Evaluation Criteria	Description	Scoring principal	Criteria	Weighting
<b>Eligibility</b>	<p>Bidder must be within the security/ CCTV installation field for at least the past 5 years.</p> <p>The Bidder and the director/s must be registered with PSIRA</p>	Yes/No	<p>Proof of bidder's field of expertise in security / CCTV installations and company history in the form of company profile and pictures</p> <p>Bidder not in security/ CCTV field or no submission of company profile and history</p> <p>Proof of Registration with the Private Security Industry Regulatory Authority for Company and Director (membership must be valid) (PSIRA)</p>	<b>N/A</b>

SCOPE OF WORK

<b>Technical and Operational</b>	Compliance to scope of work	Compliance letter on a company letterhead = 15 points  No letter submitted = 0 points	Compliance letter a company letterhead to provide service as per the scope of work	<b>15</b>
	All goods supplied and workmanship must carry a warranty period of a minimum of 1 years	≥ 12 months = 20 points ≤ 12 months = 0 points	A letter stating the warranty period in months must be on a company letterhead	<b>20</b>
<b>CV's of Technicians</b>	Two CV's of competent technicians	Two competent CV's = 15 points One competent CV = 5 points Incompetent CV / CV's = 0 points	Submission of two CV's for the competent technicians	<b>20</b>
<b>Track Record</b>	Previous experience on similar projects/works done in the past 2 years with traceable references	≥ 4 Traceable Reference letters = 25 points 3 Traceable Reference letters = 15 points 2 Traceable Reference letters = 10 points 1 Traceable Reference letter = 5 points 0 Traceable Reference letters = 0 points	Submission of traceable reference letters with values from companies that the supplier has provided similar services in the past 2 years	<b>25</b>
<b>Lead Time</b>	Lead time from PO award to delivery of spares, fitment/repair, and commissioning/handover of machine to TPT	< or = 3 weeks = 20 points > 3 weeks & < or = 4 weeks = 16 points > 4 weeks & < or = 5 weeks = 12 points > 5 weeks = 0 points	Signed declaration letter stating the Lead Time in weeks on company letterhead	<b>20</b>
<b>Minimum Technical Qualification Threshold = 70%</b>				
	<b>TOTAL RATING</b>		<b>100</b>	