

TERMS OF REFERENCE FOR SUPPLY AND INSTALLATION OF SECURITY X-RAY SCANNERS AND WALK THROUGH METAL DETECTORS ON LEASE BASIS FOR THE DEPARTMENT OF ENERGY

1. PURPOSE OF THE ASSIGNMENT

The purpose of the assignment is to appoint a Service Provider to supply and install five (5) Security X-Ray Scanners and five (5) walk through metal detectors on lease basis for a period of thirty six (36) months subject to renewal to the Department of Energy (DoE).

2. INTRODUCTION AND BACKGROUND

2.1 The Department of Energy is committed to ensure a high performance working environment and quality of work life within a conducive environment by providing security systems to the building.

2.2 DoE Head Office envisages relocating to the new building situated at Corner Visagie and Paul Kruger Streets from April 2012. It is crucial for the DoE to ensure that the building is secured in accordance with the Access Control to Premises and Vehicle Act, 53 of 1985, Minimum Physical Security Standards (MPSS) which are applicable in the Public Service.

3. SCOPE OF WORK AND DELIVERABLES

3.1 Service providers are invited to supply and install the following security systems:

3.1.1 Five (5) X HEIMANN X-RAY INSPECTION SYSTEM (HI-SCAN 60401) OR similar product. Detailed specifications are illustrated on **Annexure A**

3.1.2 One (1) X HEIMAN X-RAY TECHNOLOGY (HI-SCAN 5030 si) or similar product. Detailed specifications are illustrated on **Annexure B**

3.1.3 Five (5) X HI-PE MULTI-ZONE HIGH PERFORMANCE WALK-THROUGH METAL DETECTOR or similar product . Detailed specifications are illustrated on **Annexure C**

3.1.4 One (1) X HI-PE / CF MOBILE WALK THROUGH METAL DETECTOR. Detailed specifications are illustrated on **Annexure D**

3.1.5 The required systems will be delivered and installed as follows;

3.1.6 Physical address: Department of Energy: Head Office: Corner Visagie and Paul Kruger Streets; Pretoria

- 3.1.7 Installation of the required systems will be installed from Ground, 2nd, 4th, 7th and 8th floors, respectively. Detailed floor plans will be provided to the successful bidder.

4. DELIVERABLES

- 4.1 The successful bidder will be required to supply and install security systems as outlined from Annexure A-D of this Terms of Reference on lease basis for a period of twelve (12) months.
- 4.2 Selected bidders will be invited to make a presentation of their product and Project Execution Plan.

5. SECURITY BACKGROUND CHECKS

- 5.1 The Department reserves the right to conduct Security background checks in respect of the selected bidders, their Directors and staff. Appointment of the successful bidder will be done subject to positive background checks.

6. MAINTENANCE SERVICE LEVEL AGREEMENT

- 6.1 Service Level Agreement will be signed between the Department of Energy and the successful service provider.

7. TRAINING OF USERS

- 7.1 The successful bidder will be required to provide training and support to the users after the installation of the system. Certificate of competency must be issued after training.

8. CONTRACT PERIOD

- 8.1 The contract will be entered into between the Department and the successful service provider for a period of thirty six (36) months.

9. TERMINATION OF THE CONTRACT

- 9.1 The contract will be terminated immediately should the successful bidder no longer qualify as service provider in terms of the Private Security Industry Regulation Act, 2001 (Act 56 of 2001) or CIPRO.

9.2 Any amendment or waiving of the stipulations of the contract must occur in writing by mutual consent between the Department of Energy and the successful bidder.

9.3 The Department of Energy reserves the right to reduce / increase the required goods during the contract period. 30 days written notice will be given.

10. COMPULSORY INFORMATION SESSION

10.1 A compulsory information session will be held on **02 March 2012** at the Department of Energy, Corner Visagie and Paul Kruger Streets; Pretoria at **10H00**.

11. EVALUATION METHODOLOGY

11.1. Cost

11.1.1 The service provider will be requested to provide a quote regarding the work to be undertaken for this project. The total cost must be VAT inclusive and should be quoted in South African currency (i.e.rands). Detailed breakdown of the total bid must be attached.

11.2 Broad-Based Black Economic Empowerment (B-BBEE)

11.2.1 Provisions of the Preferential Procurement Policy Framework Act (PPPFA) 2011 and its regulation will apply in terms of awarding points.

11.2.2 Bidders are required to submit original and valid B-BBEE status level Verification to substantiate their B-BBEE rating claims.

11.2.3 Bidders who do not submit their B-BBEE status level verification certificates or are non-compliant contributors to B-BBEE will not qualify for preference points for B-BBEE.

11.2.4 In a case of Exempted Micro Enterprise (EMEs), AO/AA must ensure that the B-BBEE Status Level Verification Certificates submitted are issued by the following agencies:

- Verification agencies accredited by SANAS; or
- Registered auditors approved by IRBA

11.2.5 The table below depicts the B-BBEE status level of contribution:

B-BBEE Status Level of Contributor	Number of points (90/10 system)
1	10
2	9
3	8
4	5
5	4
6	3
7	2
8	1
Non-compliant contributor	0

11.3 Company Experience

11.3.1 Service providers should have at least three (3) years experience in providing similar(camera installation) services and should provide proof accompanied by correspondence from referees indicating that such project was executed as well as their contactable references.

11.3.2 Site visit will be conducted by departmental staff.

11.4 Registration with Private Security Industry Regulatory Authority (PSIRA)

11.4.1 The service provider must be registered with the Regulatory Authority.

11.4.2 .Proof of registration must be submitted.

11.5 Project Plan

- 11.5.1 Project plan with intermediate and final outputs and identified timeframes/milestones.
- 11.5.2 Proposed Methodology.
- 11.5.3 Management of the project.
- 11.5.4 The successful service provider will be required to present their Project Execution Plan by the selected bidders.

11.6 Warranty

- 11.6.1 Service providers should provide the warranty in case of new equipment and the maintenance plan after the expiry of the warranty period.

11.7 Commitment to deliver the required security system

- 11.7.1 The successful bidder must be able to supply and install the required security systems within two (2) weeks from the date of awarding of the contract.

12. EVALUATION CRITERIA

- 12.1 Bids will be evaluated on 90/10 point system as outlined in the PPPFA of 2011.
- 12.2 The proposals will be evaluated in two phases:

Phase 1: Bidders will be evaluated based on functionality. The minimum threshold for functionality is **70 out of 100 points**. Bidders who fail to meet minimum threshold will be disqualified and will not be evaluated further for price and preference points.

Criteria	Weights
Company Experience(at least three (3) years experience in providing similar(supply and installation of security x-ray scanners and metal detectors)services and should provide proof accompanied by correspondence from referees)	30
Registration with Private Security Industry Regulating Authority (Provide proof of registration).	20
Detailed Project/ Execution Plan and Management should be attached.	30
Warranty in case of new equipment and the maintenance plan after the expiry of the warranty period.	20
Total	100

For purpose of evaluating functionality, the following values will be applicable:

0=	Very Poor	Will not be able to fulfil the requirements
1=	Poor	Will not be able to fulfil the requirements
2=	Average	Will partially fulfil the requirements
3=	Good	The bidder will be able to fulfil the requirements
4=	Very Good	The bidder will be able to fulfil better in terms of the requirements
5=	Excellent	Fully fulfil in terms of the requirements

Phase 2:

Price	90
B-BBEE compliance	10

13. FORMAT AND SUBMISSION OF THE PROPOSAL

13.1 All the official forms (SBD) that are included in the bid document must be completed in all respects by bidders. Failure to comply will invalidate a bid.

13.2 Bidders are requested to submit two (2) copies: 1 original plus copy of the proposal and bid documents.

14. CLOSING DATE

14.1 Proposals must be submitted by **08 March 2012 at 11H00** at 70 Meintjies Street, Trevenna Office Campus, Building 2B, Ground floor, Sunnyside in the bid box **marked** Department of Energy.

15. ENQUIRIES

All general enquiries relating to bid documents should be directed to

Lebogang Mosuwe/Daisy Maraba

Tel No: (012) 444 4187/444 4373

E-mail: Lebogang.mosuwe@energy.gov.za/daisy.maraba@energy.gov.za

Technical enquiries can be directed to:

Mapale Matseke

Tel No: (012) 444 4564/079 872 5061

E-mail: mapale.matseke@energy.gov.za

ANNEXURE A

SPECIFICATIONS

HEIMANN X-RAY INSPECTION SYSTEM (Quantity = 5)

HI-SCAN 6040I OR SIMILAR PRODUCT

FEATURE HIGHLIGHTS

- High-End processor technology
- High-Speed digital signal transmission
- HI-MAT Plus advanced material classification
- High image resolution
- 24 Bit real time image processing
- New ergonomic user interface
- Free programmable priority keys

GENERAL SPECIFICATIONS

ITEM	DESCRIPTION
Tunnel dimensions	620(W) x 418 (H) (mm) . 24.4 “ (W) x 16.5” (H)
Max. object size	615 (W) x 410 (H) (mm) . 24.2 “ (W) x 16.1” (H)
Conveyor height	Approx 694 mm (27.3
Conveyor speed at mains frequency 50 HZ / 60 Hz	Approx 0.2/0.24 (m/s)
Max . conveyor load even distributed over the whole conveyor	160 kg (352 lbs)
Resolution (wire detect ability)	Standard: 38 AWG (0.1 mm) . typical: 39 AWG (0.09 MM)
Penetration (steel)	Standard: 27 mm . typical: 30 mm
X-ray dose / inspection (typical)	Standard: 0.7usv (0.07 mrem) . with HI-MAT: 1.6 usv (0.14 mrem)
Film safety	Guarantee up to ISO 1600 (33 DIN)
Duty cycle	100 %, no warm-up procedure required

X-ray Generator	
Anode voltage. Cooling	140 kV cp. Hermetically sealed oil bath
Beam direction	Diagonal
Image Generation System	
X-ray converter	L-Shaped detector line
Grey Levels stored	4096
Image presentation	B/W, colour
Digital video memory	1280 x 1024 / 24 bit
Image evaluation functions	VARI-MAT, 02, OS, HIGH
Monitor	17"-colour monitor, emission meets MPR 11 and TCO 99 standards
Additional Features Features	Fading of date time, luggage counter, user-Id-number, luggage marking system (acoustic), display of operating mode, REVIEW-feature (to recall image areas no more visible); Zoom overview, free programmable keys
Options	HI-MAT (distinction of material groups, X-ACT, HI-TIP, HI-SPOT, SEN, EPlore, IMS (Image management system))
Installation Data	
X-ray leakage	Meets all applicable laws and regulations with respect to X-ray emitting devices
CE-labelling	In compliance with guidelines 98/37/EWG, 89/336/EWG
Sound pressure level	Less than 70 dB(A)
Operating - / storage temperature	0°-40°C / 20°C-+60°C
Humidity	10%-90% (Non-condensing)
Power supply	Standard: 230 VAC or 110 VAC + 10%/-15%.50Hz /±3 Hz
Power consumption	Approx.0.8 Kva
Protection class system / keyboard	IP 20 / IP 43
Dimensions. Weight	2004 (L) X850 (W) X1284 (H) (mm).approx. 400kg
Mechanical construction	Steel construction with steel panels, mounted on roller castors Standard colour(s) : RAL 7016 (dark gray) / B11-W1 (blue)

ANNEXURE B

SPECIFICATION

HI – SCAN 5030si (Quantity = 1)

HEIMANN X – RAY TECHNOLOGY OR SIMILAR PRODUCT

Feature Highlights

- HI – MAT Plus advanced material classification
- Compact desktop solution for mobile and stationary applications
- New X- ray generator plus new sensor technology for high performance

Optional

- HI – TIP: Threat Image Projection
- Xtrain: Operator training system
- IMS: Electronic image storage and archive including copy function of images in TIF or JPG format to USB storage device

GENERAL SPECIFICATION

ITEM	DESCRIPTION
Tunnel dimensions	532 [B] x 330 [H] [mm]. 21" [B] x 13" [H]
Max. Object size	530 [B] x 320 [H] [mm]. 20.9" [B] x 12.6"
Conveyor height	Approx. 190 mm [7.4"] / 782,5 mm [30.6"] with carriage
Conveyor speed at mains frequency 50 Hz / 60 Hz	Approx. 0.18 / 0.22 [m/s]
Max. Conveyor load (evenly distributed)	60 kg [132 lbs]
Resolution (wire detect ability)	Standard: 38 AWG [0.1 mm]. typical: 39 AWG [0.09 mm]
Penetration [steel]	Standard: 10 mm. typical: 12 mm
X – ray dose (typical)	HI – MAT: 0,8 uSv [0.08 MREM]
Film safety	Guaranteed even for high speed films up to ISO 1600 [33 DIN]
Duty cycle	100%, no warm-up procedure required

X – RAY GENERATOR

Anode voltage. Cooling	100kV cp. Hermetically sealed oil bath
Beam direction	diagonal

IMAGE GENERATING SYSTEM

X – ray converter	L – shape detector line, high resolution
Grey levels stored	4096
Image presentation	B/W, color
Digital video memory	1280 x 1024 / 24 bit
Image evaluation functions	B/W, HIGH, LOW, NEG, VARI – MAT, 0 ² , OS electronic zoom: stepless enlargement up to 16 - times
Monitor	17" color monitor, low radiation according to MPR II und TCO 99 standards Other monitors on request

ADDITIONAL FEATURES

Feature	Luggage counter, user – id number, display of operating mode, Review – feature to recall previous visible image areas, zoom overview, free programmable keys
Options	HI – TIP, HI – SPOT, SEN, Xport , IMS [Image Management System]

INSTALLATION DATA

X – ray leakage	Meets all applicable laws and regulations with respect to X – ray emitting devices
CE – labelling	In compliance with 98/37/EWG, 72/23/EWG, 89/36EWG
Sound pressure level	<56dB[A]
Operating-/ storage temperature	0° - 40°C / -20°C -+60°C Type equation here.
Humidity	10% - 90% [non – condensing]
Power supply	Standard: 230 VAC or 110 VAC + 10% / - 15%. 50Hz / 60 Hz ± 3Hz

Power consumption	Approx. 0.4 kVA
Protection class system / keyboard	IP 20 / IP 43
Dimensions. Weight	1200 [L] x 705[B] x 726 [H]. approx. 160 kg 47.3" [L] x 27.7" [B] x 28.6 [H]. approx. 352 lbs
Mechanical construction	Steel construction with aluminium panels Standard color(s): RAL 9006 [white aluminium] / stainless steel

SPECIFICATION

HI-PE / CF MOBILE METAL DETECTOR (QUANTITY = 1)

CRITICAL FEATURES	Elliptic column shape or traditional panel versions available
	Dynamic threat object detection range from guns to ½ cutter blade
	Discrimination of personal effects with a very low nuisance alarm rate
	60 zones with left and right indication
	Met-identity technology identifies the metal type in real time
	High precision bidirectional counter with automatic rescreening compensation
	SweepScan4D to allow an uniform inspection field and reduce nuisance alarms
	Chip Card capability for fast, simple, and safe programming
	Random alarm capability programmable from 0% to 99%
	Advanced resistance to electromagnetic interferences
	One touch automatic self installation
	Only low voltage DC power within the gate structure
	Standard interfaces: RS-232, Bluetooth, infrared
	Interface availability by field upgrade: Ethernet, USB
QUALITY	Continuous self diagnostic system
	Proven reliability
	No calibrations required
	No scheduled maintenance
	Fully digital design
WALK-THROUGH GATE STRUCTURE	State-of-the-art, compact washable panels and elliptical columns
	Protected against aging, weather and wear
CENTRAL CONTROL UNIT	Ergonomic and robust design
	High Visibility alphanumeric display and programming keyboard
	Made of advanced plastics (IP20 protection degree) or stainless steel (AISI 304 IP65 protection degree) and antivandalic construction
	Access to the front panel protected by hardware key and a levels of passwords
	VISIBLE <u>Multi-zone display bar for “height on</u>

ALARM SIGNALLING	<p><u>person" localization</u></p> <p>SIGNALS <u>4light bars with software reversible direction and pacing indication</u></p> <p><u>Green and red metering signals proportional to the mass of the object detected</u></p>
	<p>AUDIBALE <u>High acoustic intensity alarm signal</u></p> <p>SIGNALS <u>10 continuous and pulsed tone plus 34 special tones</u></p> <p>10 sound intensities ranging from 0 to 90 dbA at 1m</p>
TYPE OF SIGNALLING	<p>Visual : fixed or proportionate to the mass in transit-visible from 6m under lighting of 4000lux.</p> <p>VISUAL WITH ZONAL Horizontal indication, via 3 distinct zones (left ,center, right)</p> <p>SUBDIVISIONS for every height: total of 60 distinct zones (20 vertical zones x3 horizontal zones)</p>
PROGRAMMING	<p>Up to 40+ built in security programs</p> <p>Remote via RS-232, Infrared Remote Control, Bluetooth™ or Ethernet 10/100 base T interface {APSIM2Plus}</p> <p>SECURITY LEVEL <u>International Standard {IS} command</u></p> <p>Chip card</p> <p>Local by Control Unit alphanumeric display and keyboard</p>
	<p>Programming and chip card access protected by {user and super } password</p>
OPERATIONAL FEATURES	<p>Very high discrimination and transit flow rate , five or more times compared with other metal detection systems</p> <p>Quick reset time, programmable from 0.2 sec. & Very high detection speed {up to 15m/s}</p> <p>Build-in operational and technical functional verification</p> <p>One-touch key reading of inbound, outbound and Security Level Data</p>
INSTALLATION DATA	<p>Automatic synchronization between two or more metal detectors with distance of down to 15cm without the use of external cables</p> <p>Built-in floor sensitivity adjustment function</p>

ANNEXURE D

SPECIFICATION

HI – PE MULTI-ZONE METAL DETECTOR

**(HIGH PERFORMANCE WALK-THROUGH METAL DETECTOR) OR SIMILAR PRODUCT
(QUANTITY = 5)**

CRITICAL FEATURES	Elliptic column shape or traditional panel versions available
	Dynamic threat object detection range from guns to ½ cutter blade
	Discrimination of personal effects with a very low nuisance alarm rate
	60 zones with left and right indication
	Met-identity technology identifies the metal type in real time
	High precision bidirectional counter with automatic rescreening compensation
	SweepScan4D to allow an uniform inspection field and reduce nuisance alarms
	Chip Card capability for fast, simple, and safe programming
	Random alarm capability programmable from 0% to 99%
	Advanced resistance to electromagnetic interferences
	One touch automatic self installation
	Only low voltage DC power within the gate structure
	Standard interfaces: RS-232, Bluetooth, infrared
	Interface availability by field upgrade: Ethernet, USB
QUALITY	Continuous self diagnostic system
	Proven reliability
	No calibrations required
	No scheduled maintenance
	Fully digital design
WALK-THROUGH GATE STRUCTURE	State-of-the-art, compact washable panels and elliptical columns
	Protected against aging, weather and wear
CENTRAL CONTROL UNIT	Ergonomic and robust design
	High Visibility alphanumeric display and programming keyboard
	Made of advanced plastics (IP20 protection degree) or stainless steel (AISI 304 IP65 protection degree) and antivandalic construction
	Access to the front panel protected by hardware key and a levels of passwords
ALARM SIGNALLING	VISSIBLE <u>Multi-zone display bar for “height on person” localization</u>
	SIGNALS <u>4light bars with software reversible direction and pacing indication</u>
	<u>Green and red metering signals proportional to the mass of the object detected</u>

	<p>AUDIBALE <u>High acoustic intensity alarm signal</u></p> <p>SIGNALS <u>10 continuous and pulsed tone plus 34 special tones</u></p> <p>10 sound intensities ranging from 0 to 90 dbA at 1m</p>
TYPE OF SIGNALLING	Visual : fixed or proportionate to the mass in transit-visible from 6m under lighting of 4000lux.
	<p>VISUAL WITH ZONAL Horizontal indication, via 3 distinct zones (left ,center,right)</p> <p>SUBDIVISIONS for every height: total of 60 distinct zones (20 vertical zones X 3 horizontal zones)</p>
PROGRAMMING	Up to 40+ built in security programs
	Remote via RS-232, Infrared Remote Control, Bluetooth™ or Ethernet 10/100 base T
	interface {APSIM2Plus}
	<p>SECURITY LEVEL <u>International Standard {IS} command</u></p> <p>Chip card</p>
	Local by Control Unit alphanumeric display and keyboard
	Programming and chip card access protected by {user and super } password
OPERATIONAL FEATURES	Very high discrimination and transit flow rate , five or more times compared with other metal detection systems
	Quick reset time, programmable from 0.2 sec. & Very high detection speed {up to 15m/s}
	Build-in operational and technical functional verification
	One-touch key reading of inbound, outbound and Security Level Data
INSTALLATION DATA	Automatic synchronization between two or more metal detectors with distance of down to 15cm without the use of external cables
	Built-in floor sensitivity adjustment function