

## **CONTENTS**

1.	PURPOSE	2
2.	BACKGROUND TO THE CONTRACTING AUTHORITY	2
3.	BACKGROUND TO REQUIREMENT/OVERVIEW OF REQUIREMENT	2
4.	DEFINITIONS	2
5.	SCOPE OF REQUIREMENT	2
6.	KEY MILESTONES	5
7.	AUTHORITY'S RESPONSIBILITIES	5
8.	REPORTING	5
9.	VOLUMES	6
10.	CONTINUOUS IMPROVEMENT	6
11.	SUSTAINABILITY	6
12.	QUALITY	6
13.	PRICE	6
14.	STAFF AND CUSTOMER SERVICE	
15.	SERVICE LEVELS AND PERFORMANCE	
16.	SECURITY REQUIREMENTS	7
17.	INTELLECTUAL PROPERTY RIGHTS (IPR)	8
18.	PAYMENT	8
19.	ADDITIONAL INFORMATION	8
20	LOCATION	g

#### 1. PURPOSE

1.1 The purpose of this procurement is to award a contract for the provision of Projectile Velocity Measuring Equipment. The equipment shall be installed in the firing test range for the Home Office Centre for Applied Science and Technology (CAST), (the "Authority").

### 2. BACKGROUND TO THE CONTRACTING AUTHORITY

- 2.1 CAST consists of a unique team of scientists and engineers at the heart of the Home Office providing expert advice, innovation and frontline support. The Authority is the primary science and technology interface between Home Office ministers and policy makers, frontline delivery partners, and the suppliers of science and technology. Understanding the policy and operational context of Home Office business allows the Authority to operate where others cannot for reasons of impartiality, national security or market failure.
- 2.2 The Authority's expertise and activities are focused into capability areas that serve the range of Home Office interests in: contraband detection, crime prevention and community safety, cyber, forensics, identity assurance, protective security, public order and surveillance.

#### 3. BACKGROUND TO REQUIREMENT/OVERVIEW OF REQUIREMENT

- 3.1 CAST conducts ballistic testing primarily for body armour certification. Work is also undertaken to determine performance of various projectiles (bullets).
- 3.2 Measurement equipment is required to capture, record, display and store the velocity of projectiles fired in the CAST indoor 30 metre range.
- 3.3 The current system is time consuming to set up and configure and is considered to be end of life. As a result replacement equipment is being sourced.
- 3.4 The Authority requires the installation to be covered by an all-inclusive support and maintenance contract. The term of the contract shall be for an initial two (2) year period with an option to extend for a further 2 years. (2+1+1).

#### 4. **DEFINITIONS**

Expression or Acronym	Definition
VME	Means: Velocity Measuring Equipment - The equipment commonly referred to as velocity or light gates, projectile velocity measuring device, sky screens

#### 5. SCOPE OF REQUIREMENT

#### 5.1 Essential Requirements

5.1.1 Physical

Must be able to fit through the CAST firing range doors. Range door height 1.97m X 1.68m width and be moved into and out of the range door without requiring disassembly.



If the equipment rests on a trolley and is unable to fit through the range door, it is acceptable for it to be taken off the trolley and put back on once in range.

- 5.1.1.1 The system must be mounted on a height adjustable fixture/frame that is mobile with lockable wheels.
- 5.1.1.2 The minimum dimension for the shot window is 640 X 360 mm (Height X Width)
- 5.1.1.3 The weight of the velocity kit including the mounting frame should be no more than 20kg. This should be easily manoeuvrable for one person.
- 5.1.1.4 All cables and connectors shall be provided by the supplier.
- 5.1.1.5 The system should be powered by UK standard mains voltage AC 230V +10%.
- 5.1.1.6 The system should be able to operate normally between the temperature ranges of -10oC to +40oC

#### 5.1.2 Performance

- 5.1.2.1 Velocity range from 50m/s to 1000m/s
- 5.1.2.2 The system must be sensitive and capable of capture that is able to display and record the velocity of projectile calibres from 3mm to 50mm.
- 5.1.2.3 Single shot measurement capability
- 5.1.2.4 The system must be able to perform a self-check before use and provide a visual display that the system is ready
- 5.1.2.5 Self-calibrating without the use of specialist equipment and can output calibration settings to provide a baseline to be used as annual certification to confirm calibration settings
- 5.1.2.6 The supplier shall provide the system requirements for the VME software. Software should run on Windows 7 or above.
- 5.1.2.7 Should be able to operate in artificial and natural day light.

### 5.1.3 Recording

- 5.1.3.1 Output from the system should interface with CAST's own computer that will display, record and save the velocity and shot data.
- 5.1.3.2 The system software should be able to export data into Microsoft Excel in .xls format

- 5.1.3.3 The test records must be saved in the software
- 5.1.3.4 The test records must be searchable on the software
- 5.1.3.5 The software must be able to display results in a clear to understand format, MS xls, and enable output to printer or digital media (Printer is not required). The software must be configurable for both nose and tail/base end measurement of the projectile.
- 5.1.3.6 Pulse input and output must have BNC connectors for compatibility with existing equipment at CAST e.g. triggers for high speed camera

### 5.1.4 Support and Maintenance

- 5.1.4.1 User guide in hard copy and electronic format.
- 5.1.4.2 The supplier must be able to fully support and service the system from the UK.
- 5.1.4.3 Suppliers to provide annual servicing, repairs and parts. A firm price for the initial two (2) year period for parts must be provided within Appendix E Pricing Schedule. This will be used for information purposes only and will not be used for evaluation purposes.
- 5.1.4.4 Where the option to extend the contract is exercised, on-going parts prices shall be agreed on an 'open-book' basis.
- 5.1.4.5 The equipment provided should come with a full manufacturer's warranty from the date of installation.
- 5.1.4.6 The supplier shall make provision for telephone support during normal office hours, Monday Friday 09:00 to 17:00. In the event of an on-site support being required the supplier shall make provision for an engineer to carry out any repairs within 5 working days of the fault being reported.
- 5.1.4.7 During the yearly planned maintenance visit the supplier must carry out calibration testing of the equipment. A certificate must be provided detailing the work carried out within 5 working days of this requirement.

#### 5.1.5 Installation and Training

- 5.1.5.1 The system should be installed, tested to ensure it is operating correctly and calibrated on the CAST site at St Albans.
- 5.1.5.2 The Authority requires the supplier to provide hands-on; interactive and practical training on the equipment once it has been installed

- 5.1.5.3 The training shall be delivered within 5 working days of the installation and should not exceed 1 day in duration. The training shall be required for a maximum of 6 delegates.
- 5.1.5.4 The training session shall be supplemented with relevant documentation such as user guides and troubleshooting questions.

#### 6. KEY MILESTONES

6.1 The Potential Provider should note the following project milestones that the Authority will measure the quality of delivery against:

Milestone	Description	Timeframe
1	Supply and install the agreed velocity measurement system at the CAST site in St. Albans	Within 4 weeks of Contract Award
2	Provide training on the system for up to 6 (six) CAST staff	Within 4 weeks of Contract Award
3	Conduct annual service and calibration	Within week 52 weeks of Contract Award
4	Provide telephone support and advice Mon-Fri between 09:00-17:00 and repair the device within 5 working days of fault reporting, subject to lead time of spare parts.	Within 4 weeks of Contract Award

### 7. AUTHORITY'S RESPONSIBILITIES

- 7.1 The Authority will follow all operating instructions and will not modify or amend the manufacturer's configuration and set-up, unless agreed with the manufacturer for certain specific tests.
- 7.2 The Authority will only use the system for the purposes of velocity or target measurements and for normal operating uses.
- 7.3 The Authority will allow access to the CAST site for regular maintenance checks and servicing between 0900hrs and 1700hrs Monday to Friday. 48 hours' notice minimum required for scheduled visits.

#### 8. REPORTING

8.1 The supplier shall be capable of conducting an initial calibration, prior to any adjustment and re-calibration, when requested. This is required to determine how much the equipment may have drifted (if at all) since the previous calibration. The supplier shall ensure the before and after calibration readings are recorded on the certificate. The pre and post adjustment calibration and any adjustment and servicing of the equipment are mandatory elements for this equipment and shall be UKAS calibrated as standard.



#### 9. VOLUMES

9.1 Single system required.

#### 10. CONTINUOUS IMPROVEMENT

- 10.1 The supplier will be expected to continually improve the way in which the required services are to be delivered throughout the contract duration.
- 10.2 The supplier should suggest more efficient and new ways of working to the authority during routine maintenance and annual service visits.
- 10.3 Changes to the way in which the services are to be delivered must be brought to the authority's attention and agreed prior to any changes being implemented.

#### 11. SUSTAINABILITY

11.1 Not Applicable

#### 12. QUALITY

The Authority requires 'standard' calibration to be defined as Tracing Calibration according to the requirement of ISO9001 (2008) / ISO10012 (2003).

#### 13. PRICE

- 13.1 The Authority would like a total price, excluding VAT, for the installed and working product with instruction manuals and software. This should include CAST staff user training for up to 6 (six) staff and installation. Annual service costs to be separate. A pricing schedule of repairs for staff time is also to be included.
- 13.2 Prices are to be submitted via the e-Sourcing Suite, Appendix E excluding VAT. Suppliers are also required to submit a quotation in their Company letter headed paper.

#### 14. STAFF AND CUSTOMER SERVICE

- 14.1 The Authority requires the Potential Provider to provide a sufficient level of resource throughout the duration of the CAST Velocity Measuring equipment Support Contract in order to consistently deliver a quality service to all Parties.
- 14.2 The Potential Provider shall ensure that staff understand the Authority's vision and objectives and will provide excellent customer service to the Authority throughout the duration of the Contract.

#### 15. SERVICE LEVELS AND PERFORMANCE

- 15.1 The supplier shall hold current and valid UKAS Accreditation (ISO/IEC 17025:2005) and ISO Registration (ISO9001 (2008) / ISO10012 (2003). If the supplier subcontracts any element of the service, the sub-contractor(s) shall hold the same certification.
- 15.2 Requests for support, repairs and maintenance are expected to be investigated by the supplier within 5 days of the reported fault or issue.



KPI/SLA	Service Area	KPI/SLA Description	Target
#1	Telephone support	Monday to Friday 9 to 5	98%
#2	Engineer attendance (resolution)	The attendance of an engineer to site within 5 working days in order to resolve fault which could not be resolved via telephone support	98%

- 15.3 Where the Authority identifies poor performance against the agreed KPI's the Supplier shall be required to attend a performance review meeting. The performance review meeting shall be at an agreed time no later than 10 working days form the date of notification.
- The Supplier shall be required to provide a full incident report which describes the issues and identifies the causes. The Supplier shall also be required to prepare a full and robust 'Service Improvement Action Plan' which sets out is proposals to remedy the service failure. The Service Improvement Plan shall be subject to amendment following the performance review meeting and agreed by both parties prior to implementation.
- The Authority agrees to work with the Supplier to resolve service failure issues. However, it will remain the Suppliers responsibility to resolve any service failure issues.
- 15.6 Where the Supplier fails to provide a Service Improvement Plan or fails to deliver the agreed Service Improvement Plan to the required standard, the Authority reserves the right to seek early termination of the contract tin accordance with the procedures set out in Appendix C Terms and Conditions.

### 16. SECURITY REQUIREMENTS

- 16.1 The supplier shall not disclose any details with regard to the Authority's requirement to a third party without written consent.
- 16.2 The Authority's site is secure and any visitors are escorted at all times so no specific security clearances are required.
- 16.3 Access to the CAST site requires 48 hours minimum notice, the names and organisations of visitors are required, suitable photographic ID needs to be provided, such as passport, driving licence, company ID or other photo ID. Cars and bags are subject to search. Basic security checks may be conducted of suppliers and third party repairers if applicable.



### 17. INTELLECTUAL PROPERTY RIGHTS (IPR)

17.1 The Authority will retain the right to own the equipment and all data resulting from tests and calibration.

#### 18. PAYMENT

- 18.1 The Supplier should ensure all invoices are sent to:
  - 18.1.1 Home Office Shared Service CentreHO Box 5015Newport, Gwent NP20 9BB

Tel: 08450 100125 Fax: 01633 581514

Email: post-room-rescan@homeoffice.gsi.gov.uk

- 18.2 If parts and consumables are required by the Authority from the supplier a written quotation must be approved by the Authority before any works commence.
- 18.3 All parts and consumables required throughout the contract will be paid via purchase order.
- 18.4 Payment can only be made following satisfactory delivery of pre-agreed certified products and deliverables.
- 18.5 Before payment can be considered, each invoice must include a detailed elemental breakdown of work completed and the associated costs.

#### 19. ADDITIONAL INFORMATION

- 19.1 A site visit will be held at the Sandridge site on Monday 31<sup>st</sup> October 2016 at Woodcock Hill, Sandridge, St Albans AL4 9HQ to enable potential suppliers to view the site.
- 19.2 Potential suppliers must confirm their attendance by Midday Thursday 27<sup>th</sup> October 2016 via a message on the e-sourcing portal. Potential providers are restricted to three individuals per visit and the names of the individuals must be provided in advance via the message on the e-sourcing portal. It is a requirement of the sites that photographic identification such as a passport or driving licence be presented at security. There is adequate parking at both sites; please note that vehicles may be subject to a security search upon entry.

### 20. LOCATION

20.1 The Authority is based in CAST, Woodcock Hill, Sandridge, St Albans, AL4 9HQ