

Title: UK-Salisbury: Provision of Blast Simulator (RFI)

**Document Type: Contract Notice** 

Published By: Ministry Of Defence (Mod)

Date Published: 30 July 2018

Deadline Date: 14 September 2018

**Notice Type: SUPPLIES** 

1 Authority Details

1.1 Authority Name and Address

Official Name: Ministry of Defence		
Postal Address: N/A		
Town: Salisbury	Postal Code:	Country: UK
For the attention of:	Telephone: N/A	
E-Mail: RFIBSim@dstl.gov.uk	Fax: N/A	
Internet Address (URL):	·	

1.2 Address from which documentation may be obtained

As in 1.1

1.3 Completed documents must be returned to:

As in 1.1

## **2** Contract Details

2.1 Title

Provision of Blast Simulator (RFI)

#### 2.2 Description of the goods or services required

A blast simulator is required to emulate the primary blast loading (shock front and overpressure history) from an explosive detonation in air, such that this loading can be applied to an instrumented target within a laboratory setting.

Ideally the Primary blast simulator will be compatible with use in an existing laboratory requiring minimal changes to the infrastructure, and safety procedures (noise, gas release, etc.). Target dimensions, mounting and positioning in blast wave

Various targets need to be tested, with sizes ranging from  $80 \times 100 \times 200 \text{mm}$  to  $200 \times 200 \times 500 \text{mm}$ . The targets are expected to be placed such that one of their faces is perpendicular to the direction of travel of the blast wave.

The target is to be mounted such that it is restrained to the support structure without modification to the target. The support structure will also have to make allowance for the protected routing of instrumentation and monitoring cables etc. attached to the target.

The target is to be positioned and supported such that the blast wave can flow around the target and its support with minimal perturbation above that caused by the target itself.

The target is to be mounted such that it can be remotely viewed e.g. video cameras.

The target is to be supported such that after receiving a shock loading it may exhibit gross displacement. The potential for damage from the longer timescale gross displacement and arrest of that displacement is to be minimised through appropriate design of the supporting structure.

The blast loading is to take the form of a Friedlander, or similar, idealised free-field blast wave. The key parameters of interest are the peak pressure and positive phase duration. While desirable, the emulation of a negative phase is not essential. The blast simulator must be able to deliver a range of selectable combinations of peak pressure and positive phase duration. The target support structure must be removable so that it can be replaced with blast measuring equipment, using the same fix points.

The equipment must include options for monitoring the blast loading environment that do not rely on instrumenting the surface of the target. The ability to exchange or modify that monitoring system (for example change the type of pressure gauge) is desirable.

- 2.3 Notice Coding and Classification
- 2.4 Total quantity or scope of tender

#### 3 Conditions for Participation

3.1 Minimum standards and qualification required

## **4 Administrative Information**

4.1 Type of Procedure

The procedure type is unknown.

- 4.2 Reference number attributed to the notice by the contracting authority n/a
- 4.3 Time Limits

Responses by 14-09-2018 Time 12:00

- 4.5 Language or languages in which tenders or requests to participate can be drawn up EN
- 4.6 Tender Submission Postbox

## **5 Other Information**

# 5.1 Additional Information

Please register on the following portal to view this notice:

 $\underline{https://www.dcicontracts.com/app/search/displayNotice.html?id=1525439029\&page=1\&position=6$ 

Deadline Date: September 14 2018 at 12:00 hrs (MT Ref:266771)

- 5.2 Additional Documentation
- 5.3 Publication date of this notice 27-07-2018