### Government of India Ministry of Finance, Department of Revenue Directorate of Logistics

### 4th Floor, 'A' Wing, Lok Nayak Bhawan,

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### INVITATION FOR EXPRESSION OF INTEREST (EOI) FOR FULL BODY SCANNER SYSTEM

**DATE: 24.01.2018** 

#### EOI No. 441/30/2017/FBS

Period during which the EOI document will be available on website <a href="https://www.cbec.gov.in">www.cbec.gov.in</a> , <a href="https://www.dolcbec.gov.in">www.dolcbec.gov.in</a> and <a href="https://www.eprocure.gov.in">www.eprocure.gov.in</a>	Time 12.00 Hrs, Dated 24.01.2018 Time 13.00 Hrs, Dated 26.02.2018
Closing date and time for receipt of EOI online	Time 13.00 Hrs, Date 26.02.2018
Place of receipt of EOI	Online www.eprocure.gov.in
Last date for submission of completed EOI	Time 13.00 Hrs
document	Date 26.02.2018

# Government of India Ministry of Finance, Department of Revenue Central Board of Excise &Customs Directorate of Logistics

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### **INVITATION FOR EXPRESSION OF INTEREST**

Dated: 24.01.2018

## <u>Directorate of Logistics, New Delhi invites Expression of Interest (EOI) for</u> Full Body Scanning Systems (FBSS)

- 1. The Directorate of Logistics, New Delhi is involved in procurement, deployment and maintenance of anti-smuggling equipments required by the field formations of Central Board of Excise and Customs. It is proposed to deploy full body scanning systems, as a secondary mode of screening, for detection of items such as weapons, explosives (plastic/power), narcotics, currency notes, detonator, precious stones/ metals, diamond, liquids, ceramics, etc. concealed under the clothes, on the body or inside body cavities of the persons and prosthetic devices etc.
- 2. Expressions of Interest are invited from reputed manufactures / suppliers for supply of Full Body Scanning Systems (FBSS) for deployment at Customs formations at International Airports. Closing date and time for receipt of EOI online at **www.eprocure.gov.in** is 26.02.2018 at 13.00 Hrs.
- 3. The detailed proforma Annexure 'A' giving broad scope of work, general requirements, system requirements, specifications, imaging performance and other requirements can be downloaded from www.eprocure.gov.in, www.cbec.gov.in and www.dolcbec.gov.in.

Sd/-

(COMMISSIONER)
Directorate of Logistics

F. No. 441/30/2017/FBS
Government of India
Ministry of Finance
Department of Revenue
Central Board of Excise and Customs
Directorate of Logistics
Customs and Central Excise
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New Delhi, the 24<sup>th</sup> January, 2018

## EXPRESSION OF INTEREST FOR SUPPLY OF FULL BODY SCANNING SYSTEMS

- 1. The Directorate of Logistics, Customs and Central Excise provides logistic support to the field formations of Customs and Central Excise in India. The Directorate is examining the feasibility of deploying full body scanning systems, as a secondary mode, for detection of items such as weapons, explosives (plastic/power), narcotics, currency notes, detonator, precious stones/ metals, diamond, liquids, ceramics, etc. concealed under the clothes, on the body or inside body cavities of the persons and prosthetic devices etc.
- Expressions of Interest are invited for supply, installation, commissioning, testing, maintenance of Full Body Scanning Systems (FBSS) along with essential accessories. Recommended specifications for FBSS are detailed below. <u>Prospective suppliers may suggest modifications /additions to these specifications</u>, as found necessary, along with the explanations for changes/ additions.

Sl. No.	Rec	commended Specifications	Confirmation / Comments/ alternate specifications by Vendor
2.1	Scope of Work		
	i)	Supply, installation & commissioning of FBSS;	
	ii)	On-site training of staff and Maintenance during warranty period of	
		two years;	
	iii)	Comprehensive Annual Maintenance Services for a period of 8	
		years after warranty.	
2.2	Gei	neral Requirements	
	i)	FBSS will be used for the screening of passengers at International	
		Airports / Land Customs Stations (LCSs), who may be carrying	
		contrabands on their person or inside their body cavities or in	
		prosthetic devices. [Supplier to indicate technology suitable for	
		the detection of items described in Para (1) above.]	
	ii)	FBSS will be installed in the general areas of existing operational	
		sites of the Customs at Airports / LCSs. [Supplier to indicate the	
		space requirement (breadth $x$ depth $x$ height) to install, operate	
		and maintain the proposed machines and provide installation	
		arrangement drawings.]	
	iii)	System should be designed to work with the commercial electrical	
		power supply available in India [Supplier to indicate electrical	
		power requirement - voltage & wattage]	
	iv)	The machine & its systems should be designed to operate at	
		temperatures of 0° C to 45° C, Relative Humidity: 5 to 95% non-	
		condensing and storage temperatures of (-) 10° C to 50°C, and no	
		deviation in the performance parameters should be noted. [Supplier	
		to indicate any specific environmental condition required to be	
		provided at the site of installation]	

2.3	Syste	m Requirements	
	_	The system should provide absolute privacy consideration for the	
		scanning images. It should blur chest and lower abdomen area	
		covering private parts. It should allow further inspection in above	
		mentioned areas only in cases of suspected concealment/suspect	
		images. [Supplier to provide the details of features available to	
		achieve this function, with supporting images]	
		System operation should be remote such that operator is not able to	
		see the identity of the person being scanned. [Supplier to provide	
		details of provisions available in this regard. Also]	
		System should have feature to automatically delete the scanned	
		images after a pre-defined time interval, unless specifically	
		required to be stored. [Supplier to provide details of provisions	
		available on the machine in this regard]	
		Scanning system should be an efficient and effective system, based	
		on latest and proven technology, and should be ideally suitable for	
		screening of persons at Airports/ LCSs. [Supplier to provide the	
		details of the proposed machines, with explanation as to how it is	
		suitable for the intended use and details of previous deployments	
		for similar applications.]	
		System should permit rapid and reliable determination of objects	
		(opaque, translucent, transparent, etc.) on the monitor screen	
		hidden/masked in other objects. [Supplier to indicate features	
		available to meet this objective and to describe the type & energy	
		of the source and type of detectors deployed]	
	vi)	FBSS should have real time image processing, including automated	
		on-line framing of suspicious materials without any operator	
		involvement. [Supplier to indicate features available for this]	
	vii)	The design, material selection, manufacture, inspection, testing and	
		its reliability evaluation should ensure availability of 95% or better	
		up-time of the machine. [Supplier to indicate mean-time-between-	
		failure for proposed machine]	
	viii)	System should have safety features, interlocks, emergency stops,	
		etc. related to the operation of FBSS. [Supplier to provide details	
		of provisions available on the machine]	
		The operating system of the workstation(s) should be in robust	
		design for 24 x 7 x 365 days operations. [Supplier to indicate	
		operating system used and the tasks which are performed by the	
		application software]	
		System should give full image of the person from head to toe, at	
		the same time allowing to see the hidden objects inside shoes up	
		till toe level. [Supplier to indicate how will it be achieved]	
		Protective construction for FBSS should be at least IP 54.	
2.4		[Supplier to indicate the IP rating for the proposed machine]	
2.4		Features: [Supplier to provide the details]	
		a) Size (Width x Depth x Height):	
		b) Overhead clearance required, if any:	
		c) Scanner set-up time:	
		d) Scanning position (standing on platform/ moving on belt):	
		e) Scan coverage (360 degree scan around person, head-to-toe):	
	f	f) No. of images (single / dual):	

	g) Scan capture time:	
	h) Modes of operation (Normal dose mode, Low dose mode, any other):	
	·	
	i) Source energy strength (Normal dose mode, Low dose mode, any other):	
	* '	
	j) Dose per scan (Normal dose mode, Low dose mode, any other):	
	k) Monitors (Size, Pixels, Nos.):	
	l) Video camera, communication devices:	
	m) Image storage capacity:	
ii)	It should be possible to examine concealed items in different	
	colours to distinguish among organic, in-organic, metallic, non-	
	metallic, liquids, including explosives/ narcotics. [Supplier to	
	indicate features available for this]	
iii)	Facility of image processing and enhancement with features like	
	pseudo colour, image zoom, contrast stretching, variable contrast,	
	inverse video, edge enhancement, boxing & highlighting, etc.	
	should be available. Image features should be keyboard	
	controllable. [Supplier to describe software capability]	
iv)	Systems should have high performance imaging capability.	
	In addition to achieving the required detectability, sensitivity and	
	resolution, images are to appear clear & focused and with sharp	
	edges & correct aspect ratio. [Supplier to describe software	
	capability]	
v)	If the machine fails to penetrate a particular item of concealment	
	then an alarm (both visual & audio) should be generated to notify	
	the operator. [Supplier to indicate the available features]	
vi)	The detection of items as described in Para (1) should be reflected	
	in the quality of image that the operator sees on the screen and	
	should indicate correct shapes, density as attenuation of signals.	
	Features available to operator should enable him to perform	
	various functions through simple menus. [Supplier to provide	
	details of available features including image depth in bit]	
vii)	Machine should be network ready for importing data into the	
	system and exporting data & images from the system to remote	
	locations for personnel data management, However, Scanner	
	system shall not have accessibility from the offices and works of	
	the Supplier or his sub-vendors/ maintenance agency [Supplier to	
	describe available features]	
viii)	In case of X-based technology, the machine should be completely	
	self-shielded. Radiation levels shall not exceed limit set by the	
	Regulatory Authority for such application. [Supplier to described	
	the shielding arrangement provided and also to indicate open	
	radiation exclusion zone (L x W) beyond the machine, required if	
	any. International safety standards to which the machine	
	complies should be mentioned]	
ix)	When the machine operates in different modes, it should be	
	possible to record and print dose level used in scanning. [Supplier	
	to indicate provision for this]	
x)	In case of X-ray based technology, radiation dose, if any, to the	
	operators of the scanning machine should be well within accepted	
	health standards. [Supplier to indicate expected dose to the	
	operator in an hour]	
xi)	The through-put from the proposed machine should be specified.	
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	[Protocol to achieve this through-put should be mentioned]	
2.5	Imaging Performance [Supplier to indicate]	
	Penetration (equivalent of steel):	
	Single wire resolution/ wire detectability (in air):	
	Thin metal imaging (minimum thickness of steel strip):	
	Thin organic imaging (minimum thickness of plastic sheet):	
	Spatial resolution (Horizontal/Vertical):	
	Contrast sensitivity/ IQI sensitivity:	
	Size of detected object (minimum) (metallic/non-metallic):	
	Material distinguishing: as under Para 2.4(ii)	
	Evaluation of imaging performance (Code/Standards):	
2.6	Other Requirements	
	i) Make & model of FBSS being proposed to be specified. In case the	
	respondent is not an OEM, confirmation that the respondent is duly	
	authorized to represent the concerned OEM.	
	ii) How privacy issues (individual, special) are addressed in the	
	proposed scanner system.	
	iii) Time required to supply and commission the FBSS from the date	
	of placement of order.	
	iv) 'No-objection certificate (NOC)' or 'Type approval certificate' as	
	the case may be, from Atomic Energy Regulatory Board (AERB),	
	Govt. of India shall be required for the offered model of machine to	
	be used in intended application.	
	v) Details of supplies made in India or abroad of similar FBSS.	
	vi) Possibility of arranging a demonstration of the proposed machine	
	in India.	
	vii) Budgetary quote of the offered FBSS (in Indian Rupees or any	
	freely convertible currency) including the CIF costs for delivery at	
	the site, the costs of installation, commissioning, etc.,	
	viii) Estimated Comprehensive Annual Maintenance Charges (may be	
	indicated as % of cost the machine).	
	ix) Detailed technical specifications for the proposed machine is to be	
	attached.	
	x) Any other information that is considered relevant and wish to be	
	highlighted.	

3. Expressions of Interest should be uploaded latest by Monday, 26.02.2018 (1300 hrs).

Sd/-(Sandeep Prakash) Commissioner