GOVERNMENT OF INDIA (Ministry of Home Affairs) DIRECTORATE GENERAL

E-220 07/05/2019

CENTRAL RESERVE POLICE FORCE

EAST BLOCK-7, SEC-1, R.K. PURAM, NEW DELHI-110066

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No. B.V-7/2019-20-C (QRs) To Dated, the 66 May 2019

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 Meharam Nagar
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 Block No. 13, CGO, Complex
 Lodhi Road, New Delhi-03
- 5. DIG (Prov), BSF Block No. 10, CGO Complex Lodhi Road, New Delhi-03
- 6. Liaison Office, Assam Rifle Room No-171, North Block, MHA New Delhi -01

Subject: Regarding QRs/TDs of Communication Equipments.

Please find enclosed herewith QRs and TDs of Nano UAV & X-BIS Simulator System as Annexure-A & Annexure-B respectively duly approved by the competent authority for further necessary action.

Encl: (QRs & TDs of subject items)

{P.R.Jha, DC (Comn)}

For DIG (Equipment)
Directorate General, CRPF

QRs of X-BIS Simulators System

S.N		Parameter
1.	It should be con	nputer based programme specially designed for the
	training of civil a	aviation security personnel. The programme should
	be focused on m	aking the security personnel efficient to detect and
	identify the thre	eat objects at the checkpoints. The system should
-	simulate similar	environment as if security personnel are checking
	the baggage with	n the help of a X-Ray machine.
2.	The system sho	ould consist of 2 parts- Theory and simulator. It
	should have a c	omprehensive and interactive training package for
	training, testing	and recording the performance of the screeners. It
	should have pr	rovision for Basic Training. Recurrent Training,
	Certification Tes	st, Performance Test and item library of at least
		a right mix of threat bags, suspicious bags and
		e images should form a part of the package.
3.	-	ould have the capability to be installed on single
-	1	kstation, a classroom over a dedicated local area
		over a wide area network (WAN) and at any remote
		rough internet. The system should provide all the
	1	trainer and administrator) their own unique and
		The system should be able to support a class of
		screeners and one instructor and should be
	1	up to 250 screeners in future. The up-gradation of
	-	stations can be either in the existing location or at
		s connected through LAN/WAN/Internet.
4.		should be provided with all the hardware
	T	equired for the purpose with following broad
	•	Client Node/Workstation:
а	CPU	Latest generation Intel Core i3/ equivalent or
		higher from same or other Chipmaker/OEM
b	Graphics &	Integrated/Dedicated Graphics card with at least
	Chip Set	2 GB RAM on Compatible OEM Mother board.
С	RAM Memory	4 GB, DDR4, 2400 MHz or higher. Expandable up
		to 16 GB.
d	Hard Disk	Minimum 1 TB 7200 rpm SATA HDD or higher
	Drive	
е	Monitor	22" HFD Antiglare monitor or higher.
f	Keyboard	104 keys
g	Mouse	Optical

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S.N	Parameter			
h	Ports	6 USB (2.0 or above) Port (With at least 2 in front), 2		
-		ports for microphone and head phone respectively in		
		front. One or more HDMI port supporting latest version		
		of connectivity.		
i	Head	Covering the ear but not of ear plug type.		
	Phones	r 18 JP		
j	Cabinet	Mini Tower		
k	Networking	802.11 a/b/c/n/ac Wireless networking capability		
	facility	alongside 10/100/1000 on board integrated network		
		port with remote booting facility, remote system		
		installation, remote wake up.		
1	Operating	Latest iteration of Windows Operating System (OS) or		
	system	equivalent from other OEMs with all the latest system		
		& security updates.		
m	Power	Screen Blanking, Hard Disk and system Idle Mode in		
	management	Power On, Set up Pass word, power supply SMPS surge		
		protected.		
n	Preloaded	Latest iteration of desktop antivirus with 360 deg		
	software	protection.		
0	Support	For 5 years for up-gradation of technology		
p	Printer	Laser printer-color, Paper size-A4, DPI- 600x600,		
		speed-20 ppm BW, C-Port, 1 USB Memory 16 MB,		
	•	Network card 10/100, duplex, Wi-Fi Connectivity		
q	UPS	Online UPS, 2 X 3.0 KVA, Single phase AC, Input and		
		single phase AC output with back up time of 120		
ļ <u>.</u>		minutes.		
5.	Specification			
i.	Housing	Rack/Tower		
	types			
ii.	Processor	Intel® Xeon ® Silver processor base 2.2 GHz (Scalable		
	type	type) equivalent or higher from other OEM with RAM 10		
	Chin Sot	GB DDR4 or higher, expandable upto 64 GB.		
iii.	Chip Set	Intel® C624 equivalent or higher from other OEM		
iv.	Processor	2 Nos		
	Quantity			
v.	Processor	10 or more core per processor		
	core			
	available			

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S.N	Parameter				
vi.	Processor cache	38.50 MB L3-8.25 MB L3, depending on model SKU			
vii.	Processor Speed	3.6 GHz, maximum depending on processor SKU			
viii.	Slots	4 PCI/PCI Express			
ix.	Memory	1.0 TB DDR4 DIMM			
X.	Memory	3.0 TB			
	Expendable				
	upto				
xi	Memory slot	24 DIMM slots (12 DIMMs pre CPU)			
xii	RAID Controller	0/1/5/10			
	supported				
xiii	SATA Controller	1Xsata Channel for ODD			
xiv	Monitor	22" or higher FHD Antiglare monitor.			
xv	Drive Bays	4 Bays (Minimum 2 internal)			
xvi	Storage Drive	3.5 inch or 2.5 inch hot-plug SAS/SATA			
	Bays	inot plug onto/ onto			
xvii	Accessible drive	1x5.25/0.4-inch for RW/ DVD			
	Bays	,			
xviii	Ports	6 USB(2.0 or above) port			
xix	LAN Controller	"4x1Gbit/s Ethernet (Rj45) 2 x 10 Gbit/s SFP+"			
XX	Operating	Should support Window 2010/2012/2016 or			
	system	latest; or Linux			
xxi	Power	Hot -plug Dual power.			
xxii	Anti Virus	Latest iteration of Server antivirus with 360 deg			
		protection.			
xxiii	Virtualization	VM Ware or any other equivalent virtualization			
		system/software/facility on board			
xxiv	Support	5 Years for Technical Up-gradation			
xxv	The above mentioned configurations of the server & its client				
	nodes/workstations are minimum standards. These are not				
	exhaustively listed and other configuration details of client node and				
	server system will	be standard or higher so as to efficiently support			
	each and every individual nod independently with the clie				
	as host and an inc	dependent server module with the XBIS Simulator			
	system with concurrent service to sharing of resou				
	minimum of 25 to maximum of 250 client nodes.				

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Train	Parameter :
	The system should be decired.
6	all such make/model of X-Ray machines in use at Indian airports
	and at foreign countries as well with the at Indian airports
	and support forward and heat
7	As per BCAS Circular 11/2015 to impatibility.
	As per BCAS Circular 11/2017 all future procurements of X-BIS machine should have dual view image system. Thus, computer based programme should also have dual view.
	based programme should also have dual view image system. Thus, computer feature.
	feature.
8	The software should provide toilers to
	to TIP (Threat Image projection) in the X-BIS. In this, the software
	automatically detects the week areas (Detection of prohibited items)
	of a trainee and enhances the number of such threats
	automatically so that more practice can be given to a trainee in area of weakness.
9	The The Tree of the trainer in area
,	The system should have the feature of ongoing training i.e. the
10	trainee should be able to resume his class where he was last at.
	The state of the s
	and complexity levels i.e. Beginner, Intermediate, Advanced and Expert kind of tutorials and practicals.
11	
	The system should be able to educate the screener from 0 % level to an approved level within 40 teaching by
	an approved level within 40 teaching hours. It should also have the flexibility for meeting the training requirement of various categories
	of screeners based on their competence level i.e. from novice to
ļ	expert.
2	It should have various tests designed to test the level of trainees at
	the start and end of the course. It should also have progress charts
	right from the beginning to the end for evaluation of the expertise
	achieved by the trainee during the course.
.3	If the trainee fails to identify/ interpret a threat object image in a
	bag in a particular class level he/she shall not be auto promoted to
	the next level. He/She shall be subject to interpretation of that type
	of images multiple times and until and unless he successfully
1	nterprets image in his/her all subsequent attempts he/she shall
1	remain in that class or level.

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S.N	Parameter
14	The image appearance in tutorials/ practical s a particular random
	and not sequential. Images of the defined difficulty shall appear in the
	random manner for evaluation or interpretation. If a screener fails to
	indentify or interpret a particular random image of threat object it
	should reappear for interpretation in the midst of subsequently
	appearing images. The screener should also not get the same images if
	he/practices/appears for the tests on the software for certain number
	of times.
15	The tutorial and test design in the system should also contain a
	module on work related questionnaire. The test system should have an
	option of objective type of question-answer pattern and should be fully
	on online/computer based. It should also contain test module on the
	theoretical knowledge part of the training.
16	The system should support image analysis on dual view basis in
	image gallery must have images captured in at least two view points
	from the screener point of view.
17	The system should evaluate the student according to the correct
	location of the position of threat objects, correct naming and total time
	taken for identification.
18	The system should have provision to programme the time limit by the
	administrator for detection of threat objects.
19	The system (both theory and simulator) should have multilingual
	contents i.e. in Hindi & English.
20	The system should have the training module enabling data collection
	and analysis of student results to make decision on the following
	points:-
	a) Requirement of further training in various categories of threat
	objects, establishing norms, per bag.
	b) X-Ray BIS image interpretation skills.
	c) Processing time and operational speed.
	d) Establishing performance standards.
21	The system should have the feature of projection of theory and
	simulator sessions through a LCD/Multimedia projector in a class
	room.
22	Instructor should be able to insert and withdraw images from the
	image library as and when desired (including during conducting test).
3	Instructor should be able to alter the classification of any item in the
	database and to choose the expected action required by the student.
4	The system should allow the trainer to build the lessons in a
	progressively difficult manner.
5	System should not allow any unauthorized tampering by incorporating
	access level restrictions.

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S.N Parameter	
26	The system should automatically conduct the training and assessment and keen a separate record of each at all the system.
	and keen a separate record of each student. These records should be retrievable.
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27	The system should be able to generate reports in various analytical forms, course wise, session wise, because
	forms, course wise, session wise, bag wise, group wise, and threat
	recognition wise etc.
IMAGI	GALLERY:
28	The system should provide images of threat and non-threat objects.
	The image gallery shall have threat images of threat and non-threat objects.
	The image gallery shall have threat images of all possible dimension of cabin baggage.
29	
	Images of Guns/Fire Arms made of organic materials and IEDs of various types and shapes should be a little in the same shoul
	various types and shapes should be available in various shapes, sizes and orientation.
30	
	The image should be in very high resolution. The image produced by
	of the should be as real as it is produced on manifes of
	operations at Security Hold Area (QUA) II:-1
	and the lide the effects of nivel stress in image and the
	brand of pixilated when 200med etc. The image gollows of all
	real X-rayed images of baggages. Their reproduction on the monitor
31	should be as natural as that are in real situations.
	The image gallery shall support storage and call back facility of images
	up to 03 year old. It shall also have a facility by which some
1	chaosic/ exemplary images can be booked marked and retrieved be at
	free subsequently. The System should have the facility of uploading
	the images by the instructors.
02	The system should be able to simulate all the features like zoom,
	magnification, image ennancement features black & white
	poeudo colour, organic & inorganic material discrimination and all
33	other aspects of X-Ray screening procedure.
	The system should allow viewing of images from different angles.
35	The images should be both colored and black & white.
	The images should include items like bombs, I.E.Ds ,knives, blades,
	scissors, explosives (organic, inorganic) ammunitions determined
į ·	order lighters, lighters and image of all restricted items enumerated in
*	order 05/2005 and such other items prescribed as
1	rombited for carry on (cabin) baggage under Indian regulations time
	o time.
36 T	The images should be of actually scanned bags. There should also be
F	division for reassembling of images which the instructor con
1 1	eassemble for different categories of images and not from images of
11	idividually scanned items assembled to merely re-assemble a real
b	ag.

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المبذ	S.N	
	37	The system should separately incorporate the feature of Threat The system should distribute the system should be s
-	0.0	Image Projection (TIP) for training of students on this aspect also. that of an X-Ray results incorporate the feature of Threat aspect also.
	38	The system should display X-Ray images at the same resolution as countries.
		that of an X-Ray mach:
-		that of an X-Ray machine used in India or at airports in other FEATURES :
01	HER	FEATURES:
3	19	The system should t
		Security agency of the country of origin of the equipment.
4	0	The firm should give the evidence of executing similar projects installation & E.
		with International A. is with international A. is a series of executing size it.
4	1 I	with International Aviation Security clients of high repute.
	r	Provided from a function and the entire great
42	N	nstallation & 5 year maintenance of the entire system should be
.	- 1	accuse the for the nec
43		To license fee for the software should be required to be paid by the urchaser for the entire warranty period of five years.
	1 -	in histaliation free of
	4	applier to 10 Instructors per location for a period of 5 working ays of 8 hours duration each.
44	TI	ays of 8 hours duration each.
1.	11	ne system and software updates and upgrades should be
	þr	ovided free of cost as and when they are available either with
45	su	ipplier or Original Equipment Manufacturer (OEM).
45		g This ominiator chould on
	ma	aintenance, node/client service/equipment management &
•	1	
1		We to the top the transfer of
	Sir	nulator Client-server configuration and finally system resources
-		
46	TI	he software should be able to upload real images from the X-
	BIS	operational in the Security Hold Area (SHA) and can
	sup	perimpose the threat images on them for training, so that the
	scr	eener can be trained on images of bags being carried out by
	pas	sengers and may not rely solely on images available in the
	soft	ware.
		The supplier will update the image library on quarterly
	bas	is for a period of 5 (five) years. The images shall be arranged by
	the	supplier from Indian and Foreign airport facilities with X-BIS
	ope	ration. Minimum 500 images of different threat objects and
	sha	Il be updated once in every 6 (six) months every year.
		If possible, an additional library of images may be arranged
		the supplier for provision of keeping extra images of different
	dire	eat baggage.
L		

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47	The system &/or its individual
	The system &/or its individual components and/or features shall or backward seamless integration facility.
48	The software should be software
	The software should not be programmed to shutdown automatically if the purchaser desired not to renew the license of the software or AMC for the hardware with the supplier.
20 1	the software or AMC for the hardware with the suppliers.

AC-II P.K.Mehta

INSP. B.C.Roy Choudhary, BSF

SB M.K.Singh Assam Rifles

S. P. Punia, AC

S.S.Sikarwar, DC CISF

P.R.Jha,DC(Comn)

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AjayKumar, AIG, Airport Sector, CISF

Harjinder Singh, DIG(Eqpt)
CRPF

Ajay Kumar Yallav, IPS, IGP(Comn &IT) CRPF CRPF

D.S.Rawa, DIG(Comn)

Md. Javed Arthur, IPS, ADG (Comn)
CRPE

Approved/Not Approved

Rajeev Rai Bhatnagar, IPS DG, CRPF

Trial Directive of X-BIS Simulators System.

S.N	Parameter	1
1	It should be computer based and	Trial Directives
	personnel. The programme should be focused on making the security personnel as	practically.
2	The system should simulate similar environment as if security personnel are checking the baggage with the help of a X-Ray machine.	
	simulator. It should have a comprehensive and interactive training package for training, testing and recording the performance of the screeners. It	Board will check practically.
i l	Recurrent Training, Certification Test, Performance Test and item library of at least 5000 mages of a right mix of threat bags, suspicious pags and clear bags. These images about 16	
I Tin control (I reconstruction should be shou	The system should have the capability to be a stalled on single standalone workstation, a plassroom over a dedicated local area network (AN), over a wide area network (WAN) and at any emote work station through internet. The system hould provide all the users (trainee, trainer and diministrator) their own unique and secure gons. The system should be able to support a lass of minimum of	Board will check oractically.
to	structor and should be upgradable for up to screeners in future. The up-gradation of up 250 workstations can be either in the existing cation or at remote locations connected through N/WAN/Internet.	

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3.		Paramet	
	rean	system should be provided with all the	Trial Directives
	Node	system should be provided with all the hard for the purpose with following broad something bro	ardware components
a	CPU	Latent	specifications. Client
		generation Intel	
		darvaicht of higher from	practically & also
b	Graphi		auso
	1	Dellicated C. 1:	J SUDINI
	Set	That at least 2 GB RAM on Community	o zim cer micate.
С	RAM	board	
	Memor	4 GB, DDR4, 2400 MHz or higher.	
d	Hard	1- 1- 10 (1) (V (1)	
	Disk	Minimum 1 TB 7200 rpm SATA HDD or higher	
	Drive	or higher	
e	Monitor	. 20" HED 4	
f	<u> </u>	The Antiglare monitor or higher.	* ,
	Keyboa	d 104 keys	
g	Mouse	Optical	
h	Ports	6 USB (2.0 or above) Port (With at least	
		2 in front), 2 ports for microphone and	
		head phone respectively in front. One	
	٠	or more HDMI port supporting latest	
		version of connectivity.	
	Head	Covering the ear but not of ear plug	
	Phones	type.	·
	Cabinet	Mini Tower	
k]	Networki	802.11 a/b/c/n/ac Wireless	
1	ng	networking	
f	acility	10/100/1000	
		network month	
		facility, remote system installation,	
		remote wake up.	
1 (peratin	Latest iteration of Windows Operating	,
g	system	System (OS) or equivalent from other	
		OEMs with all the latest system &	
		security updates.	
n P	ower	Screen Planting II 1	
m	nanage	system Idle Mode in Power On, Set up	
	nent	Pass word, power supply SMPS surge	
		protected.	
ı Pı	reloaded	Latest iteration of desktop antivirus	
sc	oftware	with 360 deg protection.	
	upport	т. –	
		technology	

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S.	.N		
		Parameter	7-1-1-
	-		Trial Directives
p	Printer	Laser noise	1
		Laser printer-color, Paper size-A4	
1		DPI- 600x600, speed-20 ppm BW, C	,
1	1		-
		card 10/100, duplex. Wi-F	<u> </u>
q	UPS	Connectivity w1-F	i
4	OFS	Online UPS 2 V 20	
		phase AC, Input and single phase AC output with back up to	
	.	output with heal-	
		minutes and up time of 120	
5	Specific	ation of Server :	
i.	Housing	Post /m	D- 1
	types	Rack/Tower	Board will check
ii.			practically & also
-4.	Processor		III will submit
	type	2.2 GHz (Scalable type) equivalent or higher from other OFM with Date	OEM certificate.
		higher from other Opes equivalent or	atte.
		higher from other OEM with RAM 10	1
		- Ol Digner over 1 1 1	1
iii.	Chip Set		
	omp Set	Intel® C624 equivalent or higher	
iv.	D	om outer OEM	
	Processor	2 Nos	
	Quantity		
v.	Processor	10 or more core	
J	core	10 or more core per processor	
	avail a ble		
	Processor	20.50.25	
	. "	38.50 MB L3 8.25 MB L3, depending	
	cache	on model SK	
	Processor	3.6 GHz, maximum depending on	
	Speed	processor SKU	
i.	Slots	4 PCI/PCI Express	
	Memory	1 O TR DDDA DDAA	
	Memory	1.0 TB DDR4 DIMM	
		3.0 TB	
	Expenda		
	ble upto		
ki	Memory	24 DIMM slots (12 DIMMs pre CPU)	
1 ;	sl ot	The state of the s	
ii R	AID	0/1/5/10	
	ontroller		
	upported		
100			
- 3	A TA	1Xsata Channel for ODD	
	ontroller		
iv	Monitor	22" or higher FHD Antiglare monitor.	
		Sauto momtor.	
v	Drive	4 Bays (Minimum 2 internal)	
	Bays	2 internal	
			j

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S.	N	-4-	
XV	i Storage	Parameter 3.5 inch or 2.5 inch bet release	Trial Directives
	Drive	SAS/SATA inch hot-plug	D
	Bays	S.I.O/ GATA	Board will check practically & also
xvii	Accessible	2 1x5 25/0 4:	firm will submit
	drive Bay		OEM certificate.
xviii	Ports		micaic.
xix	LAN	6 USB (2.0 or above) port	
	Controller	4x1Gbit/s Ethernet (Rj45) 2 x 10 Gbit/s SFP+	
XX	Operating	Should	
	system	2010/2012/0016 Window	
		Linux or latest; or	
xxi	Power		
xxii	Anti Virus	Hot -plug Dual power.	
		rectauon of Server onti-	
xxiii	Virtualiza	with 360 deg protection.	
	tion	VM Ware or any other equivalent virtualization	
xxiv	Support	system/software/facility on board	
XXV	+	5 Years for Technical Up-gradation	
	server &	we mentioned configurations of the	
	minimum	its client nodes/workstations are standards. These are not	
	I .	standards. These are not	
	details of c	y listed and other configuration	
	standard or	lient node and server system will be	
	each and	r higher so as to efficiently support	
	with the	every individual nod independently	
	independen	client module as host and an	
	Simulator s	t server module with the XBIS	
	sharing of	system with concurrent service to	
	maximum o	resources with minimum of 25 to f 250 client nodes.	
rainin	g requireme	230 client nodes.	
	security ner	m should be designed to train the Fir	m will submit
	X-Ray mach	sonnel on all such make/model of OE	CM certificate.
	at foreign co	ines in use at Indian airports and	
	independent	untries as well. It shall be machine	
		FP 515 101 Ward and	
	backward co	11.5 Table 1.5 T	
	us bet BC	of Vinto	ard will check
	procurement	s of X-BIS machine should have pra	ctically.
	uuai view im	age system. Thus, computer based	
	programme	should also have dual view image	
	system as its	teature.	

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	5.N -5-		odi
,	Parameter		
8			Trial
	as applied to TVP (TV)		Directives
	as applied to TIP (Threat Image projection) in the areas (Detact)	gramme	Board wi
			check
	TO DETECTION IN THE STATE OF THE	A 1	practically.
	Thances the number of the latter of the latt	66 and	5.
	enhances the number of such threats automatic	ally so	
9	weakiess.	area of	
	The system should be		
	i.e. the trainee should be able to resume his class	aining	Board will
10	he was last at.	where	check
10	The system should have the	1,	oractically.
	to check the ability level of the screener to identify images. It should have multi-level of the screener to identify	rocess E	Board will
	images. It should have made to identify	threat	heck
	gradual increase in difficulty	with p	ractically.
	gradual increase in difficulty and complexity level Beginner, Intermediate, Advanced and B	ls i.e.	-50
	Beginner, Intermediate, Advanced and Expert king tutorials and practicals.	nd of	
11	The system should be able to educate the screener 0 % level to an approved level with the screener		
	0 % level to an approved level within 40 teaching he level also have the flowibility of	from B	oard will
	It should also have the flexibility for meeting the tra-	ours. cł	neck
	requirement of various categories of	ining pr	actically.
-	requirement of various categories of screeners base their competence level i.e. from novice to expert.	d on	
12	It should have various tests designed to test the lev		
	trainees at the start and end of the course. It should	i	oard will
	have progress charts right from the beginning to the	also ch	eck
	for evaluation of the expertise achieved by the tra	end pr	actically.
	during the course.	inee	
13	If the trainee fails to identify/ interpret a threat of		
	image in a bag in a particular class level he/she s	ject Bo	ard will
	not be auto promoted to the next level. He/She shall		eck
	subject to interpretation of that type of images mult	l be pra	actically.
	times and until and unless he successfully interp	iple	
	image in his/her all subsequent attempts he/she s	rets	
	remain in that class or level.	hall	
14			
	The image appearance in tutorials/ practical sparticular random and not sequential. Images of	s a Boa	11.
.	defined difficulty shall appear in the random manner	_	İ
	evaluation or interpretation. If a screener fails		ctically.
			-
	indentify or interpret a particular random image		
	threat object it should reappear for interpretation in		
	midst of subsequently appearing images. The scree should also not get the same images	!	
	9 9	if	
	he/practices/appears for the tests on the software certain number of times.	101	
	certain number of times.	<u> </u>	

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S.N	Parameter	Trial	
		Directives	
15	The tutorial and test design in the system should	Board w	zill
	also contain a module on work related questionnaire.	check	ļ
	The test system should have an option of objective	practically.	
	type of question-answer pattern and should be fully		
	on online/computer based. It should also contain		
	test module on the theoretical knowledge part of the		
	training.		•••
16	The system should support image analysis on dual	-	vill
	view basis i.e. image gallery must have images	check	
	captured in at least two view points from the	practically.	
	screener point of view.		'11
17	The system should evaluate the student according to		vill
	the correct location of the position of threat objects,	check	
	correct naming and total time taken for	practically.	
	identification.	Daniel	will
18	The system should have provision to programme the	Board v	WIII
	time limit by the administrator for detection of threat	practically.	
	objects.	-	will
19	The system (both theory and simulator) should have	check	WIII
	multilingual contents i.e. in Hindi & English.	practically.	
	The state of the s		will
20	The system should have the training module enabling data collection and analysis of student		44 III
	results to make decision on the following points:-	practically.	
·		practically.	
	a) Requirement of further training in various categories of threat objects, establishing norms, per		
	bag. b) X-Ray BIS image interpretation skills.		
	c) Processing time and operational speed.		
	d) Establishing performance standards.		
21	The system should have the feature of projection of	Board	will
- L	theory and simulator sessions through a		
	LCD/Multimedia projector in a class room.	practically.	
22	Instructor should be able to insert and withdraw	Board	will
	images from the image library as and when desired	1 .	
	(including during conducting test).	practically.	
23	Instructor should be able to alter the classification of		will
	any item in the database and to choose the expected		
	action required by the student.	practically.	

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S.N	Parameter	Trial Directives
24	The system should allow the trainer to build the	
	lessons in a progressively difficult manner.	practically.
25	System should not allow any unauthorized	1-
	tampering by incorporating access level restrictions.	practically.
26	The system should automatically conduct the	
	training and assessment and keen a separate	practically.
	record of each student. These records should be	practically.
	retrievable.	
27	The system should be able to generate reports in	Board will check
		practically.
	bag wise, group wise, and threat recognition wise	producting.
	etc.	
IMAGI	GALLERY:	
28	The system should provide images of threat and	Board will check
	non-threat objects. The image gallery shall have	practically.
,	threat images of all possible dimension of cabin	
	baggage.	
29	Images of Guns/Fire Arms made of organic	Board will check
	materials and IEDs of various types and shapes	practically.
	should be available in various shapes, sizes and	1 3.1
	orientation.	·
30	The image should be in very high resolution. The	Board will check
	image produced by the software should be as real	practically as
	as it is produced on monitor of real X-BIS during	per the
	operations at Security Hold Area (SHA). High	corresponding
	resolution images shall not have the effects of pixel	BCAS circular
	stress i.e. image gets blurry, grainy or pixilated	11/2017.
	when zoomed etc. The image gallery shall contain	
	real X-rayed images of baggage. Their reproduction	
	on the monitor should be as natural as that are in	
	real situations.	
31	The image gallery shall support storage and call	Firm will submit
	back facility of images up to 03 year old. It shall	OEM Certificate.
	also have a facility by which some	
	classic/exemplary images can be booked marked	
	and retrieved hassle free subsequently. The System	
	should have the facility of uploading the images by	
00	the instructors.	
32	The system should be able to simulate all the	Board will check
	features like zoom, magnification, image	practically as
	enhancement features, black & white view, pseudo	per the
	colour, organic & inorganic material discrimination	corresponding
	and all other aspects of X-Ray screening procedure.	BCAS circular
		11/2017

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S.N	Parameter	Trial
-		Dim4:
33	The system should allow viewing of images from	n Board will
-	different angles.	check
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34	The images should be both colored and black 8	Board will
	white.	check
2=		procticelle
35	The images should include items like bombs, I.E.Ds	Board will
	,knives, blades, scissors, explosives (organic	chools
•	inorganic), ammunitions, detonators, torch lighters	proptice 11-
	lighters and image of all restricted items enumerated	
	III BCAS AvSec order 05/2005 and such other items	
	prescribed as prohibited for carry on (cabin) haggage	
	under indian regulations time to time.	İ
36	The images should be of actually scanned bags	Board will
	Inere should also be provision for reassembling of	check
	images which the instructor can reassemble for	procticelle
	different categories of images and not from images of	practically.
	individually scanned items assembled to merely re-	
	assemble a real bag.	
37	The system should separately incorporate the feature	Board will
	of Threat Image Projection (TIP) for training of	Board will check
	students on this aspect also.	practically.
38	The system should display X-Ray images at the same	
	resolution as that of an X-Ray machine used in India	Board will check
	or at airports in other countries.	i
OTHER	R FEATURES :	practically.
39	The system should have been certified by accredited	Di
	aviation Security agency of the country of origin of	Firm will
	the equipment.	submit OEM
10	The firm should give the evidence of executing similar	Certificate.
	projects with International Aviation Security clients	Firm will
	of high repute.	submit OEM
1	Installation & 5 year maintenance of the entire	Certificate.
	system should be provided free of cost.	Firm will
	onound be provided free of cost.	submit OEM
2	No license fee for the coffee 1	Certificate.
-	No license fee for the software should be required to	Firm will
	be paid by the purchaser for the entire warranty	submit OEM
	period of five years.	Certificate.

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S.N	Parameter	Trial
		Directives
43	On installation, free of cost training should be	Firm will
	provided by the supplier to 10 Instructors per	submit OEM
	location for a period of 5 working days of 8 hours duration each.	Certificate.
44	The system and software updates and upgrades	Firm will
	should be provided free of cost as and when they are	submit OEM
	available either with supplier or Original Equipment	Certificate.
4.5	Manufacturer (OEM).	,
45	Training on XBIS Simulator should essentially cover	Firm will
	operations, maintenance, node/client	submit OEM
	service/equipment management & maintenance,	Certificate.
	Server Operating System (OS) management &	
	maintenance in respect of management & running of	
	XBIS Simulator Client-server configuration and	
	finally system resources management.	
16	The software should be able to upload real images	Board will
	from the X-BIS operational in the Security Hold Area	check
	(SHA) and can superimpose the threat images on	practically.
	them for training, so that the screener can be trained	
	on images of bags being carried out by passengers	
	and may not rely solely on images available in the software.	
	The supplier will update the image library on	
	quarterly basis for a period of 5 (five) years. The	
	images shall be arranged by the supplier from Indian	
	and Foreign airport facilities with X-BIS operation.	
	Minimum 500 images of different threat objects and	
	shall be updated once in every 6 (six) months every	
	year.	
	If possible, an additional library of images may	
	be arranged by the supplier for provision of keeping	
	extra images of different threat baggage.	

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S.N	Parameter	Trial 🖟 . Directives
47	features shall be scalable, machine independent and	
	should come with forward or backward seamless integration facility.	
48	The software should not be programmed to shutdown automatically if the purchaser desired not to renew the license of the software or AMC for the hardware	Firm will submit OEM Certificate.
	with the suppliers.	

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