No. P-63013/94/02/2023/Mod-I/BSF/ 5470-8) Government of India Ministry of Home Affairs Directorate General Border Security Force (Prov Dte: Mod Cell) (Fax: 011-24367683)

> Block No.10, CGO Complex, Lodhi Road, New Delhi-03 Dated, the 3º Dec 2024

To,

### The Directorate General, AR, BPR & D, CRPF, CISF, ITBP, NSG and SSB HQr (through email)

#### Sub: <u>Corrigendum to QRs/Specification of "Advance Small ARMS Training</u> <u>Simulator"</u>.

Earlier, QRs/Specifications & TDs of Advance Small ARMS Training Simulator duly approved by the competent authority was forwarded to your office as well as uploaded on the websites of MHA vide BSF letter No.P-63013/94/02/2023/Mod-I/BSF/2557-67 dated 09 Aug 2023 (copy enclosed).

2. BSF corrigendum letter No. P-63013/94/02/2023/Mod-I/BSF/5459-65 dated 30 Dec 2024 (copy enclosed) against the above QRs/Specification & TDs is forward to your office for your information and further necessary action, please.

-do-

3. This has the approval of DG, BSF on note sheet dated **23.12.2024**.

(Dhirendra Singh Sindhu) Dy Inspector General (CTS/Prov)

#### Copy to:-

 The Technical Director NIC, North -Block, MHA (e-mail IDmpsugandhi@nic.in)

- With request to upload the approved corrigendum & QRs/Specification & TDs of "Advance Small ARMS Training Simulator" on MHA website (Division of MHA+ Police Modernization Division-Qualitative Requirements- Qualitative Requirements of Machinery & Eqpt Items with Surveillance item).
- SO (IT), North Block (e-mail ID: <u>soit@nic.in</u>).
   IT Wing, FHQ BSF.
- 4 Sh. Anoop Dhanvijay

Director- Buyer Management (CPSEs & Central Ministries). Government of India. Ministry of Commerce & Industry. Government e-Marketplace. Jeevan Tara Building. 5-Parliament Street, New Delhi-110001 e-mail: <u>anoop.dhanvijay@gem.gov.in</u> The Directorate General, CRPF With request to upload the approved corrigendum & QRs/Specification & TDs of "Advance Small ARMS Training Simulator" on BSF website

With request to upload the approved QRs/Specification of "Advance Small ARMS Training Simulator" vide this directorate letter of even number dated 09 Aug 2023 along with corrigendum letter No. P-63013/94/02/2023/ Mod-I/ BSF/5459-65 dated 30 Dec 2024 on GeM Portal please.

This disposes their letter number. M.V-I/2024-25-Prov.Ord-II(Simulator) dated 22 November 2024.

MM4 20 - 12 - 24

(Dhirendra Šingh Sindhu) Dy Inspector General (CTS/Prov)

Encl- As above.

No. P-63013/94/02/2023/Mod-I/BSF/ 5459-65 Government of India Ministry of Home Affairs Directorate General Border Security Force (Prov Dte: Mod Cell) (Fax: 011-24367683)

Block No.10, CGO Complex, Lodhi Road, New Delhi-03

Dated, the 30 Dec 2024

To

### The Directorate General, AR, BPR & D, CRPF, CISF, ITBP, NSG and SSB HQr

### Sub: <u>Corrigendum to QRs/Specification of "Advance Small ARMS Training</u> <u>Simulator (08 Lane)".</u>

CRPF Directorate vide their letter No.M.V-I/2024-25-Prov.Ord-II(Simulator) dated 22 Nov 2024 forwarded the daft Please refer this Directorate's letter No.P-63013/94/02/2023/Mod-I/BSF/2557-67 dated 09 Aug 2023 vide which QRs/Specifications of Advance Small ARMS Training Simulator (08 Lane) duly approved by the competent authority was forwarded to your office as well as for uploading on the websites of MHA.

2. Corrigendum to parameters of Training requirement mentioned on serial No.2 (a) is as under:-

|       | For  |  | Read                 |  |
|-------|--|--|----------------------|--|
| S.No. | Existing QRs   | Existing                                   | Proposed QRs         | Proposed                                   |
|       |  | TDs  |                      | TDs  |
| Para  | <b>Training Requirement</b>  |  | Training Requirement |  |
| 2(a)  | Simultaneous Firing<br>The system should be<br>capable of enabling<br>minimum 08 Lane or more<br>to practice (Fire)<br>simultaneously and<br>independently on different<br>targets each at different<br>ranges and capable of being<br>controlled and operated by<br>one instructor using a single<br>console. | To be<br>physically<br>checked by<br>BOOs. | Simultaneous Firing  | To be<br>physically<br>checked<br>by BOOs. |

3. This has the approval of DG, BSF on note sheet dated 23.12.2024.

(Dhirendra Singh Sindhu) Dy Inspector General (CTS/Prov) संख्या. पी-63013/94/02/2023/मोड– ।/सीसुबल 2557-67 भारत सरकार, गृह मंत्रालय महानिदेशालय सीमा सुरक्षा बल (रसद निदेशालय: आधुनिकीकरण सैल) (Email-comdtord@bsf.nic.in) (Fax: 011-24367683)

> ब्लाक संख्या . 10, सीजीओ काम्पलैक्स, लोधी रोड, नई दिल्ली–03. दिनांक **09** अगस्त 2023

सेवा में,

महानिदेशक:– आसाम राईफलस (through LOAR), केन्द्रीय ओद्यौगिक सुरक्षा बल, केन्द्रीय रिजर्व पुलिस बल, भारतीय तिब्बत बोर्डर पुलिस, सशस्त्र सीमा बल, राष्ट्रीय सुरक्षा गार्ड एवं पुलिस अनुसन्धान एवं विकास ब्योरो

### विषयः अनुमोदित गुणात्मक आवश्यकता / परीक्षण निर्देशों का प्रेषण

तकनीकी विशेषज्ञों के उप समूह द्वारा किए गये सूत्रीकरण एवं महानिदेशक सीमा सुरक्षा बल द्वारा अनुमोदित "Advance Small Arms Training Simulator (ASATS)" उपकरण के संसोधित गुणात्मक आवश्यकता/परीक्षण निर्देशों को आपकी अग्रिम कार्यवाही हेतु प्रेषित किया जाता हैं।

संल्गन : उपरोक्तनुसार

3. 2. 112

(इन्द्र देव सिंह) उप महानिरीक्षक (रसद)

## प्रतिलिपि :-

- तकनीकी निदेशक The Technical Director राष्ट्रीय सूचना–विज्ञान केन्द्र, नोर्थ ब्लाक, गृह मंत्रालय, नई दिल्ली NIC, North Block, MHA New Delhi (द्वारा ई–मेल) (ई–मेल पता: mpsugandhi@nic.in)
- SO (IT), North Block, MHA (Through E-mail) (E-mail address: <u>soit@nic.in</u>)
- 3. तकनीकी विंग, सीमा सुरक्षा बल
- 5. प्रशिक्षण निदेशालय, सीमा सुरक्षा बल

आपसे अनुरोध है कि उक्त उपकरण के गुणात्मक आवश्यकता / परीक्षण निर्देशों को MHA website (Division of MHA+ -Police Modernization Division-Qualitative Requirements- Qualitative Requirements of Machinery & Eqpt Items with Surveillance item) पूर अपलोड करने का श्रम करें [आम सरका) - 43 के रन्यान पर उन्त्रका करें 1

: कृपया उपरोक्तानुसार कार्यवाही करने का श्रम करें।

: कृपया उक्त उपकरण के गुणात्मक आवश्यकता/परीक्षण निर्देशों को सीमा सुरक्षा बल की वैबसाईट पर अपलोड करने का श्रम करें।

आपके यूओ संख्या–4971 दिनांक 12 मई 2023 के सन्दर्भ में अनुमोदित "Advance Small Arms Training Simulator (ASATS)" (उपकरण के संसोधित गुणात्मक आवश्यकता /परीक्षण निर्देशों को आपके सूचनार्थ एवं अग्रिम कार्यवाही हेतु प्रेषित जाता है।

फाईल

Appendix-'A'

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# **QRs & Trial Directives of Advance Small ARMS Training Simulator (08 Lane) - Revision**

| S/No. | Proposed QRs Specification   | Procedure suggested for Trial for<br>BOO  | Result expected / Desired  |
|-------|--|---|--|
| 1.    | The Advance Small Arms Training Simulator System shall be wireless.  | To be physically checked by BOO.  | As per requirement mentioned in the QRs.                                       |
| 2 (a) | <b>Training requirement</b><br>Simultaneous Firing<br>The system should be capable of enabling minimum 08 Lane or more to<br>practice (fire) simultaneously and independently on different targets each<br>at different ranges and capable of being controlled and operated by one<br>instructor using a single console  |   | The system should function satisfactorily.                                     |
| 2 (b) | <b>Feel of Firing</b><br>The system shall give feel of actual recoil, acoustic corresponding to real weapon parameters.<br>The firm should supply single recoil kit and magazine per weapon/Lane   | To be physically checked by BOO.  | The system should give desired feel and sound.                                 |
| 2 (c) | <ul> <li>Multi Weapons Facilities</li> <li>i) The system shall have the capability to adapt all types of small arms used in CAPF like INSAS,SLR,X95,Barreta &amp; Pistol etc. with their sights. It should also have the capability to adapt Small Arms of other types also which may be incorporated in forces in future.</li> <li>ii) Modification/ Up gradation as and when required in the weapons shall be carried out by the firm till life time of eqpt /system.</li> <li>iii) The system should be compatible to replicate various open sights, telescopic sight &amp; reflex sight provided with different weapons including night sights.</li> <li>iv) The list of small Arms and Sights be obtained from tendering CAPFs.</li> <li>Note:- The firm shall have an obligation to provide calibration for new sights as and when inducted in the CAPFs within the life period of equipment.</li> </ul> | <ul> <li>i) To be physically checked by BOO.</li> <li>ii) BOO should check the undertaking.</li> <li>iii) Check the performance with applying available sights</li> </ul> | The system should work<br>efficiently with all types of<br>weapons and sights. |

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| S/ <u>N</u> o.            | Proposed QRs Specification  | Procedure suggested for Trial for<br>BOO | Result expected / Desired                       |
|---------------------------|---|--|---|
| 2 (d)                     | <ul> <li>Squad Post Training</li> <li>Squad post training shall be provided in two modes.</li> <li>i) With visual feedback (normal/regular target)</li> <li>ii) Advanced moving pendulum.</li> <li>iii) In normal mode a trainee has to view the bull's eye of the target.</li> <li>While the trainee is on bull's eye a visual indication shall be given to the trainee</li> <li>iv) In advanced mode the trainee shall continuously track a pendulum.</li> <li>There should be provision of varying the speed of the pendulum/similar/ better alternative</li> </ul>  | To be physically checked by the BOO.     | As per the requirement mentioned in the QRs.    |
| 2(e)<br>(i)               | <ul> <li>Application Fire <ul> <li>i) Static Target Practice</li> </ul> </li> <li>Static Targets of application fire need to be provided in standard mode as per the user requirement. Additional features in Static targets shall include :- <ul> <li>a) Timed Practice</li> </ul> </li> <li>b) The system shall have the Facility to change the special effects like change in tactical scenarios, wind velocity, night conditions, pattern and type of clouds, fog, dust, smoke, position/ direction of sun etc.</li> <li>c) Scores shall be provided for inner, middle, outer hits and misses and in terms of percentage of score attained. There shall also be facility of customizing the scoring pattern as per the requirement of the user defining more regions on the practiced target.</li> <li>d) The system shall be capable of replaying fires of all firers simultaneously or of an individual firer.</li> </ul> | To be physically checked by the BOO.     | As per the requirement<br>mentioned in the QRs. |
| 1                         | In the case of individual fire practice, the replay can be viewed in normal and zoom $(4x)$ mode. Facility shall be there to study the muzzle movement of the weapons during a complete cycle of fire practice  |  |   |
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| S/No.        | Proposed QRs Specification  | Procedure suggested for Trial for<br>BOO | Result expected / Desired                |
|--------------|---|--|--|
|              | e) Replaying shall be provided of the point of aim, the point of impact<br>and follow through of individual firer and can be viewed in normal and<br>zoom $(4x)$ mode to facilitate the instructor to interpret the mistakes being<br>committed by the firer and to suggest corrective measures.  |  |  |
|              | f) The system shall have the capability to control the replay speed.  |  |  |
|              | g) The system shall give analysis of each shot fired.   |  |  |
|              | h) Print out of the results shall be comprehensive and shall include details<br>like target used, type of ammunition fired, type of weapon, name of the<br>firer etc. There shall be also provision of seeing the print preview and<br>down load it in PDF format.  |  |  |
|              | <ul> <li>j) Graphical depiction of the hold of the weapon, showing horizontal, vertical and oblique movements shall be provided.</li> <li>k) Static targets, which rotate on being hit shall be provided.</li> </ul>  | *  | ×6                                       |
| 2(e)<br>(ii) | Moving Target Practice- Moving Target exercises shall be provided with the following features :-  | To be physically checked by the BOO.     | As per the requirement mentioned in QRs. |
|              | a) The system should have its default targets. Besides user defined targets as specified above to be provided.  |  |  |
|              | <ul><li>b) Should be capable of controlling the speed of the target.</li><li>c) Should have the facility of replaying the tracking of a target in conjunction with movement of the firer. Details of each bullet fired on the target be given by the system.</li></ul>  | đ.                                       | 8  |
| /            | <ul> <li>d) Instructor shall be able to choose the default paths provided to define their own path. An orthographic view shall be provided for defining paths.</li> <li>e) For moving target fire practices there shall be provision of changing the special effect, as has been asked for the static targets.</li> <li>f) Target must appear in various profiles like head on oblique, lateral on</li> </ul> |  |  |
| A            |   | long Stil dune.                          | Jught Stry                               |

| Proposed QRs Specification  | Procedure suggested for Trial for<br>BOO | Result expected / Desired                |
|---|--|--|
| random path etc.<br>g) Engagement of aerial target at variable speed & Altitude e.g. UAV an<br>Drones of various size and shapes should be provided by the system for<br>LMG/ Small Arms for height upto 1000 mtrs, Size 10" to 6', Speed upt<br>40 km/Hr.  | r  |  |
| <ul> <li>Snapshot practice</li> <li>Snapshot target shall be provided with the following features :- <ul> <li>a) For each snapshot target uptime, downtime, number of exposures cabe customized and controlled.</li> <li>b) Targets with rotating/falling option shall be provided wherein, if the target is hit it shall rotate/fall</li> <li>c) Facilities similar to static targets like changing special effect replaying etc shall be provided.</li> <li>d) An exercise where the target appears at random points shall be provided. In this exercise, even the instructor shall not be aware where the target will appear.</li> <li>e) An exercise similar to 2 (e)(iii) (d) above shall be provided wherein the instructor shall be an exercise in which each firer is assigned a target with different shape and colour combination. The target shall appear randomly g) A snapshot exercise where each firing lane is assigned a different colour of target shall be provided. The targets shall appear randomly.</li> </ul> </li> </ul> | BOO.<br>e<br>e<br>e<br>e<br>h            | As per the requirement mentioned in QRs. |

g) A snapshot exercise where colour of target shall be provided 2(f)**Grouping Exercise** A grouping exercise to judge the grouping capability of a firer shall be To be physically checked by the As per the requirement there in the system. The system should generate MPI on the screen with BOO. mentioned in the ORs. coordinates. The system shall give feedback on Hold, Aim and Trigger MPI to be tested as per zeroing table (HAT) operations and a firers accuracy in terms of percentage. of each weapon. Arrangement of comparative study of grouping Target between two consecutive grouping exercises should be provided by the manufacturer. 2 (g) Replay To be physically checked by the As per the requirement a) The system shall be capable of replaying records of all lanes BOO. mentioned in the QRs. simultaneously or individual lanes only. It shall facilitate to view full trace of movement of the weapons.

S/No.

2(e)

(iii)

| S/No.   | Proposed QRs Specification  | Procedure suggested for Trial for<br>BOO | Result expected / Desired                    |
|---------|---|--|--|
|         | b) Shall be capable of replaying all lanes simultaneously or individual lanes only. In the case of individual lanes, the replaying shall be viewed in normal and zoom $(4x)$ mode. Facility shall be provided to view full trace from the beginning of the session to the end of the session, where the movement of the weapons needs to be visually traced, giving an      |  |  |
|         | opportunity of time and motion study.<br>c) Replay shall be provided as a short trace also. In short trace mode, the<br>point of aim and the point of impact (follow through) need to be<br>displayed. In the case of individual lanes the replay shall be viewed in<br>normal and zoom (4x) mode. This shall enable the instructor to interpret                            |  |  |
|         | <ul><li>the mistakes and suggest corrective measures.</li><li>d) Replay facility providing information on track and bullet numbers at the point of impact on the target shall be provided.</li><li>e) The user shall be able to control the speed of the reply</li></ul>  |  |  |
| 2 (h) 、 | <ul> <li>Video Based Scenarios         <ul> <li>a) System shall be capable of enabling the user to incorporate video shots into the simulation to include scenario for patrolling, ambush, hostage rescue, VIP security and various CI Ops. The system shall also have ability to add more scenarios with customization as per the user requirement.</li> </ul> </li> </ul> | To be physically checked by the          | As per the requirement mentioned in the QRs. |
|         | b) Ranging from simple to complex these video scenarios shall be<br>relevant to Indian Security Forces and to be created by the end user.<br>Latest version of software shall be provided.  |  |  |
| 2 (i)   | <b>Database/Documentation</b><br>The system shall provide a fully dynamic database (customizable) giving details like credentials of each trainees, his performance shown over a period of time.<br>The following documents shall be provided with the system :-  |  | As per the requirement mentioned in the QRs. |
| )       | <ul> <li>i) Software test procedure</li> <li>ii) Software user manual</li> <li>iii)Software installation procedure document</li> <li>iv)Software and hardware bilingual user handbook</li> <li>v) Software verification and validation and reliability document.</li> </ul>   | Ĩ  |  |
| 4       | - B. A A None Path  | 10. May & Can dune.                      | Broughouter in the and                       |

| S/Ŋo.  | Proposed QRs Specification   | Procedure suggested for Trial for BOO | Result expected / Desired                        |
|--------|--|---------------------------------------|--|
|        | Note : i) Software shall be upgradable.<br>ii) Certification for non-deliverable documents shall be provided.  |                                       |  |
| 2 (j)  | <ul> <li>Operational Environment</li> <li>System shall be capable of simulating following conditions :-</li> <li>a) Different modes of sky, such as clear, sparsely clouded, densely clouded and rainy conditions.</li> <li>b) Wind velocity with direction and the resultant effect on bullets shall be seen at the target with customization option.</li> <li>c) Different times of the day i.e. dawn, day, dust and night allowing instructor to specify any point in day</li> <li>d) Fog conditions with capability of depicting visibility range in meter.</li> <li>e) Depiction of different terrains like Jungle, Urban area mountains &amp; Hills, water bodies etc.</li> <li>All the simulations shall be able to be controlled by the instructor.</li> </ul>   | To be physically checked by the BOO.  | As per the requirement mentioned in the QRs.     |
| 2 (k)  | <ul> <li>Target <ul> <li>i) Different types target shall be provided like Fig-11, Fig-12, Rubia, Fig-1x1, Fig-2x2, Fig-4x4, 4x4 bunker, 5 Ton vehicle, TATA 407, Car, Jeep, Gypsy, Bus. Besides vehicle targets (Light, Medium and Heavy) should be included. Type of targets and their dimensions will be specified by the user. The system shall have provision to incorporate user defined targets as per their requirement.</li> <li>ii) Controller shall be able to assign specific number of rounds to individual lanes or to all the lanes simultaneously, with one entry.</li> <li>iii) Additional targets, if required by user shall be included. Each lane shall be capable of using different weapons.</li> <li>iv) System shall be capable of showing aiming mark at all ranges at the option of the instructor. An aimer depicting point of aim with an option to disable the aimer shall be provided.</li> <li>v) Horizontal and vertical graph capturing movement of barrel before firing shall be provided.</li> <li>vi)Aerial moving Targets e.g. UAV, Drones &amp; Helicopters should be incorporated in system for LMG/Small Arms.</li> </ul> </li> </ul> | To be physically checked by the BOO.  | As _per the requirement<br>mentioned in the QRs. |
| /<br>እ | r & if we log anoth  | Str. Story Qu' dume                   | · gutting ficuse                                 |

| S/No. | Proposed QRs Specification   | Procedure suggested for Trial for<br>BOO | Result expected / Desired |  |
|-------|--|--|---------------------------|--|
| 2 (l) | Performance Analysis   | To be physically checked by the          |                           |  |
|       | i) The user shall be able to carry out bullet analysis   | BOO.                                     | mentioned in the QRs.     |  |
|       | ii) Print out of the result shall include some or all of the parameters, as                        |  |                           |  |
|       | per the discretion of the user, with facility to preview the printout.                             |  |                           |  |
|       | iii)Graphical depiction of movement of weapon before release of                                    |  |                           |  |
|       | bullet/pressing trigger, both in horizontal and vertical plain shall be                            |  |                           |  |
|       | available to the user  |  |                           |  |
|       | iv)Option to facilitate rotation of targets on being hit shall be available                        |  |                           |  |
|       | v) Random appearance of targets at different ranges shall be available                             |  |                           |  |
|       | vi)Facility to customize appearance of targets and their intervals at each lane shall be available |  |                           |  |
|       | vii) The system shall provide for grouping exercises with facility to                              |  | 2                         |  |
|       | analyze groups to include feed -back on percentage of accuracy in                                  | 8  |                           |  |
|       | holding aiming and trigger operations. The facility to measure the                                 |  |                           |  |
|       | group shall be available both in inches and centimeters with an option                             | 40                                       |                           |  |
|       | to choose one.   |  |                           |  |
|       | viii) A grouping exercise which judges the grouping of bullets fired by a                          | 100                                      | 3                         |  |
|       | trainees and provides Hold, Aim and Trigger (HAT) feed- back with                                  |  |                           |  |
| 2     | percentage accuracy.   |  |                           |  |
| 2     | ix) Combined performance evaluation report of individual and groups to                             |  |                           |  |
|       | be provided by the software.   |  |                           |  |
|       | x) Software shall be provided to facilitate the end user to develop and                            |  |                           |  |
|       | incorporate annual range courses. Annual range course once designed                                |  |                           |  |
|       | shall appear as integrated as a menu item in the software.   |  |                           |  |
|       | xi) System to train the troops differential between rogue Drone/ flying                            | To be physically checked by the          |                           |  |
|       | object and domestic /international flight.   | BOO.                                     | mentioned in the QRs.     |  |
| 3.    | Technical Specifications   |  |                           |  |
| (a)   | Facility of Aimer  |  | As per the requirement    |  |
|       | An Aimer showing event point of aim with an option to disable the aimer                            | To be physically checked by the          | mentioned in the QRs.     |  |
| 2     | shall be provided  | BOO.                                     |                           |  |

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| S/Ŋo. | Proposed QRs Specification   | Procedure suggested for Trial for<br>BOO | Result expected / Desired                       |
|-------|--|--|---|
| (b)   | <b>Range</b><br>The system shall have the capability facilitate target engagement from 10 to 2000 meters in individual lanes or in all the lanes simultaneously.   | To be physically checked by the BOO.     | As per the requirement mentioned in the QRs.    |
| (c)   | <ul> <li>Special Effects</li> <li>Special effects shall be provided on the range to simulate :-</li> <li>i) Different modes for sky like clear sky, dense clouds, sparse clouds, rain clouds etc.</li> <li>ii) The system shall provide configurable time of day (for e.g. night dusk/dawn and day)</li> <li>iii) The system shall provide configurable fog, wind and smoke condition which once enabled shall allow adjustment of visibility at varying ranges</li> </ul>   | To be physically checked by the BOO.     | As per the requirement mentioned in the QRs.    |
| (d)   | <u>Preview</u><br>Facility to preview the range shall be provided in the set up mode. The<br>range shall be displayed at the beginning of the exercise   | To be physically checked by the BOO.     | As per the requirement mentioned in the QRs.    |
| (e)   | <u>Weapon Calibration</u><br>Facility of calibration shall be provided. The details of the calibration<br>shall be stored of current as well as future sessions  | To be physically checked by the BOO.     | As per the requirement<br>mentioned in the QRs. |
| (f)   | <u>Annual Range Course</u><br>The system software shall have the capability to generate a range course<br>as pursuers requirement and should appear in the main menu   | To be physically checked by the BOO.     | As per the requirement mentioned in the QRs.    |
| (g)   | <ul> <li><u>3D Scenario</u></li> <li>The system shall be capable of generating Computer Generated Imagery based 3-D scenario including humans, vehicles, different terrains and structures and built up areas. 3D human targets shall react to firing as would be in case of real humans.</li> <li>The following are the scenarios should be available with the application :-</li> <li>i) Jungle warfare akin to Anti Naxal scenario</li> <li>ii) Ambush attack</li> <li>iii) Fidayeen attack</li> <li>iv) Scenario for employment &amp; firing PAGs.</li> <li>v) Patrol</li> <li>vi) Raid attack</li> <li>vii) Raid defence</li> </ul> | To be physically checked by the BOO.     | As per the requirement<br>mentioned in the QRs. |

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| S/Ŋo. | Proposed QRs Specification  | Procedure suggested for Trial for<br>BOO  | Result expected / Desired                    |
|-------|---|---|--|
|       | <ul> <li>viii) Cordon and Search</li> <li>ix) House Clearance drill</li> <li>x) Hostage Rescue</li> <li>xi) VIP protection</li> <li>xii) Sniper shot</li> </ul>   | 5)<br>5)  |  |
| (h)   | <b>Voltage Requirement</b><br>The system shall work on 160-240 Volt AC, single phase or commercial 3 phase power supply   | To be physically checked by the BOO.  | As per the requirement mentioned in the QRs. |
| (i)   | Storage capacity<br>There shall be minimum 5 Tera Byte data storage capacity  | To be physically checked by the BOO.  | As per the requirement mentioned in the QRs. |
| (j)   | Service Life<br>The service life of system shall be minimum 10 years  | OEM certificate in this regard to obtained & checked.   | As per the requirement mentioned in the QRs. |
| (k)   | <u><b>Temperature Range</b></u><br>The Simulator shall be capable to operate effectively in the temperature<br>ranging from (-) 10 degree Celsius to (+) 50 degree Celsius  | To be physically checked by the BOO.<br>Certificate from NABL accredited lab shall be provided. | As per the requirement mentioned in the QRs. |
|       | <b>Tropical Condition</b><br>The system should be capable of operating upto $25^{\circ}$ Celsius with 90% relative humidity.  | Certificate from NABL accredited lab shall be provided.   | As per the requirement mentioned in the QRs. |
|       | The Advance Small Arms Training Simulator System should be wireless   | To be physically checked by the BOO   | As per the requirement mentioned in the QRs. |
| 4.    | <b><u>Training</u></b><br>The firm will arrange and conduct free of cost training for a duration of 02 weeks in operation and maintenance at respective consignee location for the number of personnel as per requirement of the user | A certificate in this regard may be obtained from OEM   | As per the requirement mentioned in the QRs. |
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| S/Ŋo. | Proposed QRs Specification  | Procedure suggested for Trial for BOO | Result expected / Desired                    |
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| 5.    | Misc<br>a) The software with Devnagri/Roman Hindi Script shall also be<br>supplied  | To be physically checked by the BOO.  | As per the requirement mentioned in the QRs. |
|       | b) The system should be portable with facility to set it up within 2 hours  |                                       |  |
|       | <ul><li>c) The warranty will be of minimum three years period</li><li>d) The AMC clause should allow for AMC after expiry of the warranty</li></ul>   |                                       |  |
|       | e) The system should work within normal voltage of 220 volts AC single phase/Generator/2.2 KV UPS backup  | 17<br>11                              |  |
|       | f) The computer with latest configuration minimum 32 GB or more RAM<br>, 8 GB Graphic Card, minimum 1 TB or more SSD to be provided with<br>antivirus   | N                                     |  |
|       | g) Projector should be of minimum 3000 ansi lumens.   | **                                    |  |
|       | h) Software up gradation, if any during the warranty period should be updated at free of cost.  |                                       |  |
|       | i) The simulators should be successfully installed within 120 days of issuing of PO. (Point to be considered at the time of tender process)   |                                       |  |
|       | j) A reasonable level of in house R&D back up of the manufacturer in<br>India is desirable as the end user would like to constantly review and<br>upgrade the technology to cater to future training requirements. Such<br>R&D facility should be certified by Government of India or NABL.<br>(Point to be considered at the time of tender process) |                                       | e.   |
|       | k) The maximum time required to attend a service call should be less than 7 days from the date of receipt of call.  |                                       |  |
| )     | 1) Functional demonstration of the product as per requirement of the user need to be shown at the time of technical evaluation.   |                                       |  |
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| S/No.  | Proposed QRs Specification   |   | Procedure suggested for Trial for<br>BOO | Result expected / Desired     |
|--------|------------------------------|---|--|-------------------------------|
|        | m) The company providing the | ASATS should have the capacity to           |  |                               |
|        |                              | aintenance, support for both, hardware      |  | AL.                           |
|        |                              | eriod of service life of the equipment i.e. |  |                               |
|        | 10 years or more. 7          | 6 6 70 700                                  |  |                               |
|        | <u></u>                      |   |  |                               |
|        | Riv                          | 2617723                                     | Rall                                     | Nowever Pro-P                 |
| (B K 1 | Mehta), ADG (Log), BSF       | (D S Rawat), DIG(Trg), BSF                  | (Ajeet Kumar), Comdt. (SIW), BSF         | (Dr. Raveesh Kumar), PSO(W),  |
|        |                              |   | r  | BPR&D                         |
| 2      | K.Slowy                      | I MWL JUBINS                                | du l                                     | Sume.                         |
| (K Ela | amurugan), Asstt. Director,  | (B K Singh), 2IC(Trg), BSF                  | (Mukesh Kumar), 2IC (SIW), BSF           | (Arun R, AIG(Ord), CISF       |
| DCPV   | " A water "                  | Zand  | * Ann                                    | · Qui                         |
| (Ajay  | Kumar Shama), DC(Comn), SSB  | (Maj Semchon Hungon), TC, NSG               | (Paramjeet), DC(AIA), BSF                | (Sunil Kumar), AC, CRPF       |
|        | Julivie                      |   | NS                                       | Stushy                        |
| (Ravir | ider Kumar, AC/GD, ITBP      | (Gaurav Drall), AC, SIW, BSF                | (Inspr/RM Manish'Raj), SIW, BSF          | (Sub D P Mishra), Assam Rifle |
|        | I                            |   |  |                               |
|        |                              |   | 1  |                               |

Approved /Not Approved

Director General Boarder Security Force

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