

Targeting Sensor  
(version 2.2)

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MCoE - Infantry & Armor School

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This System Training Plan (STRAP) is preliminary.  
Front end analysis (mission, task, job) is ongoing. MCoE - Infantry & Armor  
School will amend  
and update this STRAP as details solidify.

MCoE - Infantry & Armor School is the proponent for this STRAP. Send  
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## 1.0 System Description

a.

The United States Army Maneuver Center of Excellence (MCoE) has identified a requirement for hostile fire detection for maneuver elements operating outside the protection of supporting fire and conventional logistical support. The need for small or portable targeting sensors, which provide reliable hostile fire locations with direction, distance and coordinates, inform the Soldier and or Squad Foundation as a Decisive Force in contact with relevant target proximity in complex operational environments.

The sensor need originated from the Operational Need Statement (ONS) issued by 101st Airborne Division (Air Assault), approved in April 2003. The requirement outlined the need for a portable, flexible, robust and accurate means of detecting hostile direct fire for maneuver elements operating in complex environments, normally conducting dismounted patrols. Numerous engagements in urban, mountains, wooded and similar complex environments reinforced the need for detection sensors that include various available direct fire weapons that form the fluid current operational pictures affecting the decision process for the squad size elements. Achieving and maintaining overmatch precision fires against asymmetric forces requires better target information and situational awareness (SA).

b. The Armament Research, Development and Engineering Center initiated an effort by modifying a commercial off-the-shelf (COTS) passive acoustic sensing system to meet the needs of the ONS. Development of small wearable or mounted sensors provides Soldiers a detection capability available where they operate with no mounting hindrances. The path forward is smaller systems that are interoperable with similar informational sensors that provide pre-shot, post shot and sub-structural targeting information for precision sighting and engagements to the Soldier.

The Targeting Sensor (TS) threshold capability provides a component system to the individual Soldier and the squad to provide target information within the user's field of view with some of heads up display (HUD) that does not reduce the near and peripheral SA, wirelessly through some close proximity radio or data transmission protocol. The target information is available for transmission to adjacent units through a common data or text format using an existing secure network. This device will not act as the conduit for communications, but will digitize target information and interface with communications equipment available to the Soldier in contact and subsequently

populate SA repositories. Availability of multiple COTS items establishes the baseline for development of the device and minimizes the acquisition program risk to satisfy this required capability.

c. The TS will use the evolutionary acquisition approach, delivering the current force an improved/initial capability followed by increased performance increments over time as technology matures including Plug-N-Play capabilities allowing interoperability with a user's individual equipment to locate and transmit hostile fire origination events to maneuver forces in complex operational environments. The TS detects hostile fire ranging from .22 to .50 calibers to encompass the majority of small arm threat profiles under stationary or dynamic conditions.

The TS provides enhanced SA within operational squads in accordance with the Basis of Issue Plan (BOIP) to maximize detection coverage and better enable the ground commander's priority. Joint Forces will use the TS capability as a baseline to develop modifications that best suit specialized mission sets. The Army Acquisition Objective for the Army will be 12,584 systems for this increment.

d. Low Rate Initial Production of the TS currently planned for 2QFY2017 with a First Unit Equipped (FUE) of 4QFY2017.

## 2.0 Target Audience

The primary target audience for operations and employment training are Infantrymen, Armor Crewmen, Calvary Scouts, Engineers, who are serving in Infantry, Stryker and Heavy BCTs. All maintenance above operator level will be performed by contract logistical support. Commanders should designate select Non-Commissioned Officers (NCOs) to receive additional training enabling them to serve as Subject Matter Experts (SMEs) in the training, operation, employment, and maintenance of the TS. These NCOs would best serve at company level. Table 2-1 shows the target audience by functional area, and Military Occupational Specialty (MOS) or Area of Concentration (AOC). Prerequisite skills, knowledge, and attributes that are required to effectively employ, operate, maintain, and train the TS will not exceed those required by the MOS and skill level shown.

Table 2-1

Function	Job	MOS/AOC	
Employer/Leader	Infantry Company (IBCT, SBCT, ABCT)	11A CPT	
	Company Commander	11A LT	
	Platoon Leader	11B/C40	
	Platoon Sergeant	11B/C30	
	Squad Leader		
	Operator	Rifle Squad Leader	11B30
		Fire Team Leader	11B20

	Infantryman Indirect Fire Infantryman Scout Team Leader CalvaryScout Armor Crewman Engineer Squad Leader Sapper Squad Leader Assault Squad Leader Breech Squad Leader Combat Engineer Military Policeman CBRN Specialist	11B10 11C10 19D20 19D10 19K10 21B30 21B30 21B30 21B30 21B10 31B10 74D10
Maintainer (Operator level)	Squad/Team Member (See Operator) Signal Support Systems Specialist	See operator  25U10
Trainer	Squad/Team Leader/Vehicle Commander	11B, 21B, 19D, 19K, 31B, 74D at 20-30 level
Subject Matter Expert (SME)	Squad/ Team Leader/Vehicle Commander	Same as trainer

### 3.0 Assumptions

### 4.0 Training Constraints

#### Constraint: Personnel

Probable Impact: Resident military/GS instructors in the institution unavailable.

Mitigating Efforts: Use contract instructors for resident courses.

#### Constraint: Training equipment

Probable Impact: TS are unavailable for institutional resident training.

Mitigating Efforts: Mobile training teams (MTT) conduct courses at homestation, using unit equipment.

#### Constraint: Number of personnel to be trained

Probable Impact: Institutional student load exceed capacity.

Mitigating Efforts: MTTs conduct courses at homestation: reduces travel costs, training time, eliminates resident equipment requirement.

### 5.0 System Training Concept

TS training will produce Soldiers proficient in operating and maintaining the TS, leaders who can effectively plan for and employ TS in combat operations, and units that can execute and sustain TS operations and training. NET will provide initial proficiency for individual operator and maintenance skills, as well as leader's employment skills to key leaders. Institutional training will be limited to TS employment training integrated into applicable courses. Distance Learning (DL) based instruction for operators, maintainers, and leaders will supplement residential training. After NET, unit training will train new operators and leaders as well as sustain

individual and organizational proficiencies relying on already trained unit NCOs and key leaders, the training support package(s) delivered during NET.

### 5.1 New Equipment Training Concept (NET)

New Equipment Training Strategy (NET). TS will be fielded to units under the Unit Set Fielding (USF) concept at home-station. NET will be consolidated at Brigade Combat Team level (or higher where the fielding plan and unit schedules permit). The NET Team will be composed of contractors and will use a train-the-trainer

approach. Selected leaders will be trained on TS, who will in turn train unit operators and leaders. NET will leverage computer based training, Interactive Multimedia Instruction (IMI), and Training Aids, Devices, Simulators and Simulations (TADSS) as appropriate. Units will be fielded the TS, all applicable TADSS, and a TSP. NET focuses on three functions - operations and maintenance, employment of TS, conducting unit sustainment training.

### 5.2 Displaced Equipment Training (DET)

Displaced Equipment Training (DET) Strategy. TS does not displace any other equipment.

### 5.3 Doctrine and Tactics Training (DTT)

TS will not affect current doctrine. DTT will focus on employment and sustainment of TS operations and collective Tactics, Techniques, and Procedures (TTP).

### 5.4 Training Test Support Package (TTSP)

The Training Developer (TD) will provide the TTSP to the operational support package. The TTSP will be delivered for review and approval by United States Army Infantry School (USAIS), within 60 days prior to start of operational test. All required publications, technical manuals, critical collective task list, lesson plans, student guides, program of instruction (POI) minus the required web-based IMI on the operation and maintenance of TS provided to facilitate DL will be included in the system TTSP.

The final TTSP will consist of:

## 6.0 Institutional Training Domain

Generating force training will consist of operator and maintenance training. Individual tasks will be trained to both the active and reserve component. There will be no difference in the training content between active and reserve components. Non-proponent Institutions will rely on training products developed by the proponent in determining the need for training on TS at their proponent Institution and to the extent of training on TS.

### 6.1 Institutional Training Concept and Strategy

The institutional training strategy to provide Soldiers trained in TS will be accomplished by integrated training on employing the TS and sustaining its operations in combat Training for the TS consists of hands on operators training for the function of the system. Leaders use their current tactical training and techniques with the enhanced target data provided by the system to direct fires quicker and more precisely.

The training proponent will make appropriate changes in doctrine and TTPs based on

TS

fielding and deployment lessons learned, and will develop necessary institutional training material.

T

he individual critical task analysis, revise the TSPs and prepare to introduce them to Army Training Information Architecture.

#### 6.1.1 Product Lines

Training Support Packages supporting individual tasks will be developed by

USAIS and the MCoE Directorate of Training and Doctrine (DOTD) Training Developer. The TSP will be developed by Training Developer. Professional Military Education courses will be supported by this TSP and incorporated into the current curricula. The Training Developer will update appropriate training publications.

#### 6.1.1.1 Training Information Infrastructure

The contractor will develop a TM in the Logistics Support Activity, Interactive Electronic Technical Manual (IETM) format and a hard copy will be provided with each TS system. The TSP will be stored in Training Development Capability (TDC) and the Central Army Registry (CAR).

##### 6.1.1.1.1 Hardware, Software, and Communications Systems

##### 6.1.1.1.2 Storage, Retrieval, and Delivery

##### 6.1.1.1.3 Management Capabilities

##### 6.1.1.1.4 Other Enabling Capabilities

Not Applicable.

#### 6.1.1.2 Training Products

The PM will provide an Operators Manual that will provide the operator instructions on system operations and operator level maintenance of this system. The PM will ensure that a task analysis is conducted on the system to determine the tasks required.

A major part of this systems training is the TSP. It will contain the full complement of training support products as required by TRADOC Regulation 350-70 and Combined Arms Training Strategy (CATS) to support training. The PM will develop Multimedia training materials and Technical Manual that will

conform to Army design standards.

#### 6.1.1.2.1 Courseware

Training materials will be created by the Materiel Developer in conjunction with PM SMS

, USAIS and MCOE DOTD as part of the TSP.

#### 6.1.1.2.2 Courses

Institutional training of the TS will be integrated into NCOES (Advanced Leader Course), OES (Basic Officer Leadership Course) by the appropriate branch. Training will focus on operation, maintenance and employment. The training products developed by the proponent will be available to other schools as needed.

#### 6.1.1.2.3 Training Publications

Publications will include a technical manual, quick reference guide, TSP and Soldier training publications. Updated publications will be available from the PM SMS and

CAR. MCOE and CASCOC will maintain the TSPs.

#### 6.1.1.2.4 Training Support Package (TSP)

TSPs will be developed in accordance with TRADOC Regulation 350-70, Army Learning Policies and Systems, dated 6 DEC 2011. The TSP will be made available to other proponent Centers of Excellence for use in Branch specific training.

#### 6.1.1.3 TADSS

TS will be integrated into the Integrated Training Environment (ITE) in each of the simulation environments Live, Virtual, Constructive and Gaming (LVC and G).

#### 6.1.1.3.1 Training Aids

Although not anticipated, task analysis may reveal a need for particular training aids.

#### 6.1.1.3.2 Training Devices

Although not anticipated, task analysis may reveal a need for particular training devices.

#### 6.1.1.3.3 Simulators

The development of capabilities to integrate TS into three simulations is required.

These TADSS will primarily support the operational training domain.

#### 6.1.1.3.4 Simulations

PEO Soldiers systems will provide the data for requirement generation to Constructive and Gaming in order for replication of TS in constructive simulations and gaming products such as VBS2. The

Desktop Trainer is largely a software solution that would allow training on individual operator tasks on the TS on a typical personal computer (PC) or laptop. The system would use the actual operator controller unit interfaced with the PC to provide simulated TS operations in varied scenarios and missions.

The TS will be integrated into all future simulations as they are developed.

#### 6.1.1.3.5 Instrumentation

TS will be compliant with the Common Training Instrumentation Architecture (CTIA), and be interoperable the current Instrumentation Systems [i.e., Home station Instrumentation Training System (HITS), and Combat Training Center-Instrumentation System (CTC-IS)]. The Training capability must be compatible with LVCG-IA training enablers within the integrated training environment.

#### 6.1.1.4 Training Facilities and Land

The TS will utilize current training facilities and land the training requirements are met.

##### 6.1.1.4.1 Ranges

No additional ranges are required.

##### 6.1.1.4.2 Maneuver Training Areas (MTA)

No additional training areas are required.

##### 6.1.1.4.3 Classrooms

Introducing the TS to the force does not require modifying any existing classroom.

##### 6.1.1.4.4 CTCs

No additional centers are required for training.

##### 6.1.1.4.5 Logistics Support Areas

Training will require no additional or modifications to logistical support areas.

##### 6.1.1.4.6 Battle Command Training Centers (BCTC)

TS will not have connectivity to the mission training complexes.

#### 6.1.1.5 Training Services

TS will require training services as outlined below. Coordination of these services is the responsibility of the PM SMS.

##### 6.1.1.5.1 Management Support Services

##### 6.1.1.5.2 Acquisition Support Services

Development of all Interactive IMI products and instructors for NET will require contract management services. The Management Decision Package for PM SMS

will provide funds for these efforts.

##### 6.1.1.5.3 General Support Services

Distribution and replication service

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#### 6.1.2 Architectures and Standards Component

The Institutional Architecture begins with the NET TSP developed by the Training Developer in conjunction with the PM SMS

. The NET TSP contains instruction on performing operator and maintainer tasks on the TS, as well as any TTP developed by the institution's Combat Developer/Training Developer, associated with the employment of the TS. The NET TSP is handed off to the institution where the DOTD provides the package to their Training Development Division (TDD) for refinement and development of the training support systems used in the institution. The TDD will use the NET TSP to revise existing POIs. Soldier Training Products will be developed, given to the Distributed Learning element for media formatting, and then made available for Self-Development training. Collective Training products will be developed or updated incorporating TTPs. Doctrine writers will incorporate the developed TTPs in the updates to doctrinal manuals.

#### 6.1.2.1 Operational View (OV)

Training of the TS will require access to training areas which require resourcing. The TS may be used by Joint forces, but does not have a Joint training or operational role.

#### 6.1.2.2 Systems View (SV)

The target information is available for transmission to adjacent units through a common data or text format using an existing secure network.

#### 6.1.2.3 Technical View (TV)

A component system to the individual Soldier and the squad to provide target information within the user's field of view with some of heads up display (HUD) that does not reduce the near and peripheral SA.

### 6.1.3 Management, Evaluation, and Resource (MER) Processes Component

TS will maintain personnel under contract to the PM SMS

. This include site management, operations and operating force coordination, system instruction, support to after action reviews, systems maintenance and logistical support.

#### 6.1.3.1 Management

Management of the TS will remain the responsibility of the PM SMS throughout its life cycle. Management of TSS products will transfer to MCoE DOTD upon completion of NET.

##### 6.1.3.1.1 Strategic Planning

TS will require a fielding plan and basis of issue plan.

##### 6.1.3.1.2 Concept Development and Experimentation (CD&E)

There is no concept development and experimentation associated with TS.

#### 6.1.3.1.3 Research and Studies

DOTMLPF analysis was conducted during the Joint Capabilities Integration and Development System (JCIDS) process.

#### 6.1.3.1.4 Policy and Guidance

The following provide the direction for TSS implementation, maintenance, and sustainment.

#### 6.1.3.1.5 Requirements Generation

#### 6.1.3.1.6 Synchronization

Material Fielding Plan (MFP) will serve as the single stand-alone document containing the detailed plans and actions the fielding and gaining unit commands will accomplish to successfully field and deploy the TS. It is anticipated that initial fielding will be based on deployment schedule of receiving BCTs.

#### 6.1.3.1.7 Joint Training Support

There is no joint training support requirement associated. Evaluation necessary to develop, field, and train the TS will be IAW applicable Army regulations, pamphlets, and guides.

### 6.1.3.2 Evaluation

#### 6.1.3.2.1 Quality Assurance (QA)

QA plans will be used IAW each installation's QA plan. Each QA Office (QAO)

will use proven techniques to determine the quality of training provided by the institution. External evaluations will focus on the use of tasks trained, the proper application of those tasks, and identification of tasks not trained but needed. Internal evaluations will focus on the presentation of the tasks at the institution, the course content, and the presentation of material by the instructor.

#### 6.1.3.2.2 Assessments

The assessment will evaluate the effectiveness and efficiency of institutional training at the individual level; identify needed changes to increase unit training proficiency and combat mission capabilities; and identify, evaluate, and resolve standardization issues.

#### 6.1.3.2.3 Customer Feedback

#### 6.1.3.2.4 Lessons Learned/After-Action Reviews (AARs)

MCoE DOTD will leverage the Center for Army Lessons Learned (CALL) database for new TTPs as well as conducting face to face interviews with units/individuals returning from theater to ensure training programs and instruction remain current/relevant.



AC/DC Power	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Other						
Rationale: Classrooms with standard electrical power are required for NET.						
Training Products						
Training Pubs		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
TSP		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
IMI		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
ETM	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
STP	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
IETM	\$40K	\$40K	\$45K	\$50K	\$50K	\$50K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Distribution	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Rationale: Cost to develop, revise, maintain, and distribute Training Products. Includes cost to develop TSP that will be used for NET, institutional, operational, and self-development domains.						
TADSS						
Simulators	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Simulations	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
GTA	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Software	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Trng Equip*	0.6K	0.6K	0.9K	0.9K	0.8K	0.7K
Equipment	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Shipment	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Sustainment	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
Rationale: Cost to procure and sustain TADSS. Includes cost to develop and maintain a simulator for institutional training. Also includes the cost to						

procure and maintain actual systems for training use.

\*Actual item of equipment used for training which does not lose its identity as an end item for operational purposes.

Training Services/TII						
LMS	0.6K	0.6K	0.8K	0.7K	0.6K	0.5K
Services	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Servers	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Licenses	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
IT Support	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
Other	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
Rationale: Software license and IT support will be required.						
Eval/QA						
Contractor	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY
Civilian	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY
Enlisted		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
Warrant		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
Officer		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
Contract/Spt	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
Civ Pay	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
Trvl/Per Diem	\$40K	\$40K	\$45K	\$50K	\$50K	\$50K
Equipment	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
TEA	\$100K	\$100K	\$100K	\$100K	\$100K	\$100K



## 7.0 Operational Training Domain

a. Operating forces will maintain individual and collective proficiency by scheduling training and training events in accordance with operating force Combined Arms Training Strategy (CATS), to include employment of TS at combat training centers.

b. Operator. TS NET training will produce Soldiers proficient in operating and maintaining the TS; Soldiers who can effectively plan for and employ the TS in combat operations; and Soldiers that can execute and sustain TS operations and training. NET will provide initial proficiency for individual Soldiers, and maintenance skills. After NET, operating forces will train new Soldiers and leaders as well as sustain individual and organizational proficiencies relying on the TSPs delivered during NET.

## 7.1 Operational Training Concept and Strategy

The NET team will leave TS TSPs with the unit following NET. The unit is responsible for sustaining individual and collective proficiency with the TS, as well as the training of new TS operators. The unit is responsible for sustaining individual and collective proficiency with the TS via maneuver training rotations and home station training, as well as the training of new TS operators. In order to ensure this is accomplished Training Developers and commanders will integrate sustainment training requirements into their unit CATS. TSPs will be maintained by MCOE and available via CAR, Distributed Learning (DL).

### 7.1.1 Product Lines

The following product lines for Operational training:

#### 7.1.1.1 Training Information Infrastructure

TII will use Hardware, Software&Communicating Systems and the Other Enabling Capabilities.

#### 7.1.1.1.1 Hardware, Software, and Communications Systems

The following will be used for individuals, Operating forces worldwide:

#### 7.1.1.1.2 Storage, Retrieval, and Delivery

Training Development Capability (TDC) or current approved Army automated database. The Central Army Registry (CAR), Distributed Learning (DL) and Center for Army Lessons Learned (CALL) repositories are currently used as the local and global means to disseminate training products. Army Modernization Training Automation System (AMTAS) is used to track and update NET requirements.

#### 7.1.1.1.3 Management Capabilities

Management capabilities for the TS TSS products include the following:

#### 7.1.1.1.4 Other Enabling Capabilities

#### 7.1.1.2 Training Products

Training products (individual and collective tasks, drills, TSP's and CATS) will be developed, maintained, and stored in the current Army approved automated system for delivery to the operating forces through the Digital Training Management System (DTMS).

Note: All training products will be developed, maintained, and stored in the approved automated system.

#### 7.1.1.2.1 Courseware

Interactive Multimedia instruction (IMI) will be created by the Materiel Developer in conjunction with the Training Developer and 197 th BDE as part

of the TSP.

#### 7.1.1.2.2 Courses

Courses are limited to the generating force.

#### 7.1.1.2.3 Training Publications

Publications will include a technical manual, interactive training CD, quick reference guide, TSP and Soldier training publications. Updated publications will be available from PM SMS

, the Central Army Registry, AKO, Warrior Information Network and the TRADOC publications website. MCOE and CASCOM will maintain the TSPs to support the Operating Forces.

#### 7.1.1.2.4 TSP

TTSP will be developed in accordance with TRADOC Regulation 350-70, Systems Approach to Training Management, Processes, and Products.

#### 7.1.1.3 TADSS

TS will be integrated into the Integrated Training Environment (ITE) in each of the simulation environments Live, Virtual, Constructive and Gaming (LVC and G).

##### 7.1.1.3.1 Training Aids

Although not anticipated, task analysis may reveal a need for particular training aids.

##### 7.1.1.3.2 Training Devices

Although not anticipated, task analysis may reveal a need for particular training devices.

#### 7.1.1.3.3 Simulators

Three simulators should be evaluated and considered for development in support TS training. These TADDS will primarily support the operational training domain.

#### 7.1.1.3.4 Simulations

PEO Soldiers systems will provide the data for requirement generation to TCM Gaming in order for replication of TS in gaming products such as VBS2. The Desktop Trainer is largely a software solution that would allow training on individual operator tasks on the TS on a typical personal computer (PC) or laptop. The system would use the actual operator controller unit interfaced with the PC to provide simulated TS operations in varied scenarios and missions.

The TS will be integrated into all future simulations as they are developed.

#### 7.1.1.3.5 Instrumentation

TS will be compliant with the Common Training Instrumentation Architecture (CTIA), and be interoperable the current Instrumentation Systems [i.e., Home station Instrumentation Training System (HITS), and Combat Training Center-Instrumentation System (CTC-IS)]. The Training capability must be compatible with LVCG-IA training enablers within the integrated training environment.

#### 7.1.1.4 Training Facilities and Land

The TS will utilize current training facilities and land the training requirements are met.

##### 7.1.1.4.1 Ranges

The TS will utilize current ranges the training requirements are met.

##### 7.1.1.4.2 Maneuver Training Areas (MTA)

The TS will utilize current Maneuver Training areas the training requirements are met.

#### 7.1.1.4.3 Classrooms

Additional classrooms will not be required with the fielding of TS.

#### 7.1.1.4.4 CTCs

The TS will utilize current CTCs the training requirements are met.

#### 7.1.1.4.5 Logistics Support Areas

Additional Logistics Support Areas will not be required with the fielding of TS.

#### 7.1.1.4.6 Battle Command Training Centers (BCTC)

TS will not be used at BCTCs.

#### 7.1.1.5 Training Services

TS will require training services as outlined below.

##### 7.1.1.5.1 Management Support Services

##### 7.1.1.5.2 Acquisition Support Services

Development of all Interactive Multimedia Instruction (IMI) products and instructors for NET will require contract management services. The Management Decision Package for PM SMS

will provide funds for these efforts.

##### 7.1.1.5.3 General Support Services

Training aids development, procurement and distribution is initially the responsibility of PM SMS

. Training aids sustainment will be budgeted for and is the responsibility of the Program Manager.

### 7.1.2 Architectures and Standards Component

The Institutional Architecture begins with the NET TSP developed by the Training Developer in conjunction with the PM SMS

. The NET TSP contains instruction on performing operator and maintainer tasks on the TS, as well as any TTP developed by the institution's Combat Developer/Training Developer, associated with the employment of the TS. The NET TSP is handed off to the institution where the Directorate of Training and Doctrine (DOTD) provides the package to their Training Development Division (TDD) for refinement and development of the training support systems used in the institution. The TDD will use the NET TSP to revise existing POIs. Soldier Training Products will be developed, given to the Distributed Learning element for media formatting, and then made available for Self-Development training. Collective Training products will be developed or updated incorporating TTPs. Doctrine writers will incorporate the developed TTPs in the updates to doctrinal manuals.

#### 7.1.2.1 Operational View (OV)

Training of the TS will require access to training areas which require resourcing. The TS may be used by Joint forces, but does not have a Joint training or operational role.

#### 7.1.2.2 Systems View (SV)

The target information is available for transmission to adjacent units through a common data or text format using an existing secure network

#### 7.1.2.3 Technical View (TV)

A component system to the individual Soldier and the squad to provide target information within the user's field of view with some of heads up display

(HUD) that does not reduce the near and peripheral situational awareness.

### 7.1.3 Management, Evaluation, and Resource (MER) Processes Component

TS will be maintained by CLS personnel under contract to the PM SMS

. CLS will include site management, operations and operating force coordination, system instruction, support to after action reviews, systems maintenance and logistical support.

#### 7.1.3.1 Management

Management of the TS will remain the responsibility of the PM SMS throughout its life cycle. Management of TSS products will transfer to DOTD, TDD, and Doctrine upon completion of NET.

##### 7.1.3.1.1 Strategic Planning

TS will require a fielding plan and basis of issue plan to field to the operating force.

##### 7.1.3.1.2 Concept Development and Experimentation (CD&E)

There is no concept development and experimentation associated with TS.

##### 7.1.3.1.3 Research and Studies

There are no research projects or studies associated with TS.

##### 7.1.3.1.4 Policy and Guidance

The following provide the direction for TSS implementation, maintenance, and sustainment.

##### 7.1.3.1.5 Requirements Generation

#### 7.1.3.1.6 Synchronization

Material Fielding Plan (MFP) will serve as the single stand-alone document containing the detailed plans and actions the fielding and gaining unit commands will accomplish to successfully field and deploy the TS. It is anticipated that initial fielding will be based on deployment schedule of receiving BCTs.

#### 7.1.3.1.7 Joint Training Support

There is no joint training support requirement associated. Evaluation necessary to develop, field, and train the TS will be IAW applicable Army regulations, pamphlets, and guides.

#### 7.1.3.2 Evaluation

##### 7.1.3.2.1 Quality Assurance (QA)

QA plans will be used IAW each installation's QA plan. Each QA Office (QAO) will use proven techniques to determine the quality of training provided by the institution. External evaluations will focus on the use of tasks trained, the proper application of those tasks, and identification of tasks not trained but needed. Internal evaluations will focus on the presentation of the tasks at the institution, the course content, and the presentation of material by the instructor.

##### 7.1.3.2.2 Assessments

The MCoE will start assessing the TS training program one year after training is implemented. The assessment will evaluate the effectiveness and efficiency of institutional training at the individual and unit levels; identify needed changes to increase unit training proficiency and combat mission capabilities; and identify, evaluate, and resolve operating and generating force standardization issues.

#### 7.1.3.2.3 Customer Feedback

Feedback from the user will consist of the following:

#### 7.1.3.2.4 Lessons Learned/After-Action Reviews (AARs)

CALL documentation (repositories, newsletters, etc), lessons learned and AARs will be used for further development for the TS training materials and instruction.



Equipment	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
AC/DC Power	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Other						
Rationale: Classrooms with standard electrical power are required for NET.						
Training Products						
Training Pubs		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
TSP		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
IMI		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
ETM	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
STP	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
IETM	\$40K	\$40K	\$45K	\$50K	\$50K	\$50K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Distribution	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Rationale: Cost to develop, revise, maintain, and distribute Training Products. Includes cost to develop TSP that will be used for NET, institutional, operational, and self-development domains.						
TADSS						
Simulators	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Simulations	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
GTA	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Software	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Trng Equip*	0.6K	0.6K	0.9K	0.9K	0.8K	0.7K
Equipment	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Shipment	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Sustainment	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
Rationale: Cost to procure and sustain TADSS. Includes cost to develop and						

maintain a simulator for institutional training. Also includes the cost to procure and maintain actual systems for training use.

\*Actual item of equipment used for training which does not lose its identity as an end item for operational purposes.

Training Services/TII						
LMS	0.6K	0.6K	0.8K	0.7K	0.6K	0.5K
Services	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Servers	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
Licenses	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
IT Support	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K
Other	0.5K	0.5K	0.5K	0.5K	0.5K	0.5K

Rationale: Software license and IT support will be required.

Eval/QA						
Contractor	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY
Civilian	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY	1.0MY
Enlisted		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
Warrant		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
Officer		0.2MY	0.2MY	0.2MY	0.2MY	0.2MY
Contract/Spt	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
Civ Pay	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
Trvl/Per Diem	\$40K	\$40K	\$45K	\$50K	\$50K	\$50K
Equipment	\$200K	\$200K	\$200K	\$200K	\$200K	\$200K
Printing	0.1K	0.1K	0.1K	0.1K	0.1K	0.1K
TEA	\$100K	\$100K	\$100K	\$100K	\$100K	\$100K



## 8.0 Self-Development Training Domain

The TM and TSP will be left with the unit and will be available on line via CAR to support self-development training and the army training network (ATN) will also have a link to this training material. These products combine to provide the Soldier with all the tools necessary to support self-development.

### 8.1 Self-Development Training Concept and Strategy

#### 8.1.1 Product Lines

##### 8.1.1.1 Training Information Infrastructure

###### 8.1.1.1.1 Hardware, Software, and Communications Systems

###### 8.1.1.1.2 Storage, Retrieval, and Delivery

Not Applicable

###### 8.1.1.1.3 Management Capabilities

Not Applicable

###### 8.1.1.1.4 Other Enabling Capabilities

Not Applicable

#### 8.1.1.2 Training Products

All training support manuals, training literature publications, and other training products will be provided during NET. It is the unit's responsibility to make these materials available to individual Soldiers for self-development. The training materials will also be available on the CAR.

##### 8.1.1.2.1 Courseware

MCoE DOTD and USAIS will assist in the training development and ensure operational training requirements are met. Once the training strategy is proven, it will be made available to Soldiers via the CAR/ATN.

#### 8.1.1.2.2 Courses

Not applicable

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#### 8.1.1.2.3 Training Publications

#### 8.1.1.2.4 Training Support Package (TSP)

#### 8.1.1.3 Training Aids, Devices, Simulators and Simulations (TADSS)

Not Applicable

#### 8.1.1.4 Training Facilities and Land

Not Applicable

#### 8.1.1.5 Training Services

Not Applicable

#### 8.1.2 Architectures and Standards Component

Not Applicable

#### 8.1.3 Management, Evaluation, and Resource (MER) Processes Component

Not Applicable

A Milestone Annex

Training Development Milestone Schedule - Sheet A		Page 1 of 2 pages	Requirements Control Symbol	
System Targeting Sensor	ACAT  III	TRADOC Symbol	As of Date  11 Mar 2013	
Proponency		Agency	Office Symbol	Telephone
Materiel Command		Program Executive Office- Soldier Maneuver Systems	SFAE	(973) 724-7861
TRADOC Proponent		United States Army Infantry School	ATSH	(706) 545-5796
System Manager		N/A		
Combat Developer:		Soldier Division, Capabilities Development&I ntegration Directorate (Mr. Matthew Pickett)	ATZB-CIS	(706) 545-9713
Training Developer:		Systems Training		

		Branch, Directorate of Training&Doct rine	ATZK-TDT	(706) 545-8010
Supporting Proponents:				
Item	Date	Responsible Agency/POC	Office Symbol	Telephone
MNS:		SD, CDID	ATZB-CIS	(706) 545-9713
SMMP:				
CPD:		SD, CDID	ATZB-CIS	(706) 545-9713
ILSMP:				
TTSP:		STB, DOTD	ATZK-TDT	(706) 545-3887
QQPRI:				
BOIP:		Office of Infantry Proponency	ATZB-CIC	(706) 545-3311
NETP:		SD, CDID	ATZB-CIS	(706) 545-9713
STRAP		STB, DOTD	ATZK-TDT	(706) 545-8010
COMMENTS: (Continue on reverse side if necessary)				

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TRADOC

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Training Development Milestone Schedule -Sheet B	Page 2 of 2 pages	Requirements Control Symbol
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SystemTargetingSensor (TS)

## B References

C Coordination Annex

Organization/POC (Date)	Summary of Comments Submitted (A/S/C)			Comments Accepted/ Rejected						Rationale for Non-Acceptance - S, C
				Accepted			Rejected			
	A	S	C	A	S	C	A	S	C	
v2.2.2 Jerry E Niggemann 2013/07/18 - 2013/07/28	Review Pending			0	0	0	0	0	0	-
v2.2.1 Approvals - Paul J Kizinkiewicz 2013/07/08 - 2013/07/18	Document Accepted As Written			0	0	0	0	0	0	-
v2.2 Army - USAREUR 2013/04/17 - 2013/05/17	Document Accepted As Written			0	0	0	0	0	0	-
v2.2 Army - TRADOC_ARCIC 2013/04/17 - 2013/05/17	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - TCM- Virtual (CS/CSS) 2013/04/17 - 2013/05/17	No Comments Submitted			0	0	0	0	0	0	-
v2.2 Army - TCM- SBCT 2013/04/17 - 2013/05/17	0	5	0	0	5	0	0	0	0	
v2.2 Army - TCM- Live 2013/04/17 - 2013/05/17	0	0	2	0	0	2	0	0	0	
v2.2 Army - TCM- ABCT 2013/04/17 - 2013/05/17	No Comments Submitted			0	0	0	0	0	0	-

v2.2 Army - TCM Intel Sensors 2013/04/17 - 2013/05/17	No Comments Submitted	0	0	0	0	0	0	0	-
v2.2 Army - SIGCoE - Signal School 2013/04/17 - 2013/05/17	0	1	0	0	1	0	0	0	0
v2.2 Army - SCoE 2013/04/17 - 2013/05/17	No Comments Submitted	0	0	0	0	0	0	0	-
v2.2 Army - PEO- STRI Customer Support Group 2013/04/17 - 2013/05/17	Document Accepted As Written	0	0	0	0	0	0	0	-
v2.2 Army - MSCoE - MANSCEN 2013/04/17 - 2013/05/17	Document Accepted As Written	0	0	0	0	0	0	0	-
v2.2 Army - MCCoE 2013/04/17 - 2013/05/17	No Comments Submitted	0	0	0	0	0	0	0	-
v2.2 Army - IMCOM 2013/04/17 - 2013/05/17	Document Accepted As Written	0	0	0	0	0	0	0	-
v2.2 Army - FCoE - Field Artillery 2013/04/17 - 2013/05/17	Document Accepted As Written	0	0	0	0	0	0	0	-
v2.2 Army - Brigade Modernization Cmd (BMC) 2013/04/17 - 2013/05/17	No Comments Submitted	0	0	0	0	0	0	0	-
v2.2 Army - AVNCoE Aviation Logistics School 2013/04/17 - 2013/05/17	No Comments Submitted	0	0	0	0	0	0	0	-

v2.2 Army - ATSC TSAID 2013/04/17 - 2013/05/17	No Comments Submitted	0	0	0	0	0	0	-
v2.2 Army - ATSC Fielded Devices 2013/04/17 - 2013/05/17	Document Accepted As Written	0	0	0	0	0	0	-
v2.2 Army - ATSC 2013/04/17 - 2013/05/17	Document Accepted As Written	0	0	0	0	0	0	-
v2.1 Peer - USAACE - Aviation School 2013/03/14 - 2013/04/13	Document Accepted As Written	0	0	0	0	0	0	-
v2.1 Peer - Transportation School 2013/03/14 - 2013/04/13	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - TRADOC_ARCIC 2013/03/14 - 2013/04/13	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - TCM- SBCT 2013/03/14 - 2013/04/13	Document Accepted As Written	0	0	0	0	0	0	-
v2.1 Peer - SIGCoE - Signal School 2013/03/14 - 2013/04/13	Document Accepted As Written	0	0	0	0	0	0	-
v2.1 Peer - SCoE 2013/03/14 - 2013/04/13	Document Accepted As Written	0	0	0	0	0	0	-
v2.1 Peer - PM- Tactical Vehicles 2013/03/14 - 2013/04/13	No Comments Submitted	0	0	0	0	0	0	-
v2.1 Peer - PM-HBCT	No Comments	0	0	0	0	0	0	-

2013/03/14 - 2013/04/13	Submitted									
v2.1 Peer - PEO- STRI Customer Support Group 2013/03/14 - 2013/04/13	0	0	1	0	0	1	0	0	0	
v2.1 Peer - MSCoE - MANSCEN 2013/03/14 - 2013/04/13	5	3	0	5	3	0	0	0	0	
v2.1 Peer - IMCOM 2013/03/14 - 2013/04/13	Document Accepted As Written			0	0	0	0	0	0	-
v2.1 Peer - FORSCOM/TRADOC LNO 2013/03/14 - 2013/04/13	No Comments Submitted			0	0	0	0	0	0	-
v2.1 Peer - FORSCOM G3 2013/03/14 - 2013/04/13	No Comments Submitted			0	0	0	0	0	0	-
v2.1 Peer - FCoE- ADA School 2013/03/14 - 2013/04/13	Document Accepted As Written			0	0	0	0	0	0	-
v2.1 Peer - FCoE - Field Artillery 2013/03/14 - 2013/04/13	2	11	2	2	11	2	0	0	0	
v2.1 Peer - ATSC 2013/03/14 - 2013/04/13	0	1	0	0	1	0	0	0	0	

Key
Completed Review with Comments
Completed Review, No Comments

Active Review Occurring



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
HEADQUARTERS UNITED STATES ARMY MANEUVER CENTER OF EXCELLENCE  
1 KARKER STREET  
FORT BENNING, GEORGIA 31906-5000

8 JUL 2013

ATZK-TD

MEMORANDUM FOR RECORD

SUBJECT: Targeting Sensor System Training Plan

1. References:

a. TRADOC Regulation 350-70, Army Learning Policy and Systems, 6 December 2011.

b. Targeting Sensor Capability Development Document, 1 February 2013.

c. Army Regulation 350-1, Army Training and Leader Development, 18 December 2009.

2. I hereby approve this Targeting Sensor System Training Plan. A copy of the plan will be posted to the Central Army Registry within 30 days of the approval date.

3. Point of contact is Mr. Stephen Searles, Systems Training Branch, Training Development Division, Directorate of Training and Doctrine at DSN 835-8010, Com (706) 545-8010, or e-mail [stephen.w.searles.ctr@mail.mil](mailto:stephen.w.searles.ctr@mail.mil).

A handwritten signature in black ink, appearing to read "H. R. McMaster", written over a horizontal line.

H. R. MCMASTER  
Major General, USA  
Commanding