Army Training Information System (ATIS)

Capability Requirements Document (CRD)

Part 1: Capability Need Identification

Part 2: Business Solution Analysis

DRAFT // PRE-DECISIONAL WORKING PAPERS

Final Draft v2 22 August 2022

Prepared By:

TRADOC Proponent Office, Army Training Information System

Combined Arms Center - Training

Combined Arms Center, Training and Doctrine Command

APPROVAL PAGE

Functional Sponsor: *Date:*

COL Scott C. Woodward
Deputy Commanding Officer
Combined Arms Center - Training

Pre-certification Authority: *Date:*

BG Charles T. Lombardo
Director of Training
Department of the Army G-3/5/7

Milestone Decision Authority: *Date:*

Ross R. Guckert
Program Executive Officer
Enterprise Information Systems

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EXECUTIVE SUMMARY

The Secretary of the Army directed TRADOC to examine the areas of Leader Development, the Army Profession, Training and Education, and the Effects of Army resizing on the training base. Additionally, he asked TRADOC to consider the establishment of an Army Training Information System (ATIS). In answer, the TRADOC Commander directed the Institutional Education and Training Reform Study (2012), which concluded, "The Army … requires a long overdue investment in the institutional training base that can be offset through reinvestments from other efficiencies." Modernization across the DoD and the Army includes initiatives and investment in talent management, data management, information technology efficiency, and communication. The Army needs 21st Century tools to train and build leaders for 21st Century Warfare, and our antiquated, disparate legacy training systems are insufficient to meet emerging needs. ATIS will be the single Army Authoritative Training and Education management, resourcing, and forecasting tool at all echelons from individual through collective training and self-development. Further, once developed, it will improve talent management and assist both the Institutional and Operational Army with an intuitive and interconnected system of tools that will unencumber junior leaders and allow Soldiers and leaders to use the principles of training outlined in Field Manual 7-0, Army Regulation 350-1, and TRADOC Regulation 350-70. Once realized, the Secretary's vision of an ATIS will free up commanders and leaders to drive the training process and utilize Artificial Intelligence/Machine Learning data collection capabilities to capture training, and more importantly, assess the performance to keep our units within the band of excellence.

The speed of technological change allows actors around the world to militarize emerging technologies, such as artificial intelligence, unmanned vehicles, and communication devices and platforms. These technologies are available right now on the commercial market. The Army is focusing on rapid modernization and building a Multi-Domain Operations (MDO)-ready force by 2030. Critical in this integration is modernizing how the Army trains and develops leaders. The Army Training Vision 2030 specifies we must modernize the tools we provide to commanders and subordinate leaders at echelon to achieve their training objectives, while also being stewards of finite resources provided by the Army in a fiscally constrained reality. We can no longer afford bespoke, expensive, unintegrated training and education (T&E) information systems. Today's disparate systems are expensive and utilize outdated technologies that do not talk to one another and place undue administrative burden that reduces available time to lead and train.

The Army requires an enterprise solution that meets the needs of the entire force across all three training domains: Operational, Institutional, and Self-development for all COMPOs including Civilians. ATIS does this through the subsumption of 28 legacy training information systems which consist of 70 plus applications. Both the training community and senior leaders require an interoperable training development, training management, scheduling, and delivery capability that establishes a Common Operating Picture (COP) for training readiness to eliminate redundancy, facilitate communication and coordination, and improve planning and resource alignment. This provides for tracking an individual's journey from initial entry through terminal rank, and potentially, on to secondary Civilian or contractor careers; while maintaining comprehensive records and training data to document and quantify the entire experience. Commanders and leaders require capabilities to visualize training and education data for individuals, small units, and within or across commands. System provided data visualization, planning tools, resource coordination, and accessible learning products allow commanders to implement standards-based, proponent recommended strategies and conduct training to build individual proficiency and collective competence, resulting in trained and ready units.

TPO ATIS met with stakeholders and system owners to validate desired system features (aka, function points), identify known capability gaps and document external system interdependencies. Features identify, at a high level, the desired end state for ATIS in each capability. Gaps identify capabilities that existing legacy systems do not perform and represent opportunities to save time, optimize business processes and improve data for analysis and visualization. System interfaces define the authoritative data that will support ATIS (ex. Force structure and personnel data) and the authoritative data that ATIS will provide to the Army for numerous purposes (readiness, talent management, input to resourcing models, etc.). TPO ATIS incorporated stakeholder input into this version of the CRD. Additional consolidation of

the input into a more concise, but also complete, form is underway. Through this process TPO ATIS will link each area to the requirements traceability matrix and will leverage the requirements control board process to validate any newly defined requirements.

A key assumption is that most legacy training information systems are candidates for subsumption by ATIS. All enduring functionalities will reside within the Business Mission Area (BMA) Training and Readiness (T&R) Domain; either integrated at data level or fully subsumed under the ATIS umbrella. Subsumption under ATIS not only realizes efficiencies via consolidation — of now interoperable system capabilities; it consolidates systems from the Warfighter Mission Area and BMA into just the BMA. This reduces or eliminates funding competition and simplifies governance.

Table 1 provides a summary comparison of status quo versus the desired end state for training information.

Table 1: Status Quo Limitations v. Desired End State

Training & Education Current State	Desired End State
• Most current training systems do not effectively talk to each other or interface with non-training systems. Users often enter the same information in multiple systems.	• Eliminate duplication, decrease administrative burden, and lower risk of conflicting information.
• Users must log into multiple systems to create and manage training events. Scheduling training resources and support requires spreadsheets, email, and phone calls.	• Single access point for all aspects of training and education management. Automated workflows and approvals to reduce complexity and time. Deconflict resource enablers.
• Systems hosted at multiple locations. Have limited mobile hand-held and commercial access options.	• Army wide enterprise, cloud solution accessible anytime at the point of need. Mobile applications for on/off network functions.
• Training and education records are not centrally located and do not support holistic career or talent management.	• Provide central access to Soldier, Civilian, and unit qualifications and experience to better assess unit performance.
• Legacy systems have inefficient, hard-to-use user interfaces, particularly for data-entry tasks.	• Leverage industry best practices to improve usability.
• The Army cannot effectively see itself because data is not captured when users do not want to use legacy systems due to wasted time and effort.	• Easy to use software and data entry tools that Soldiers deem useful and want to use. Capture and share authoritative data, so the Army can see itself better.

PART 1: CAPABILITY NEED IDENTIFICATION

1. Define Business End State and Problem or Opportunity

1.1. Problem Statement

The Army must be trained and ready to meet the challenges of a dynamic environment in which it will conduct operations—from humanitarian and civil support to counterinsurgency to major combat operations—often simultaneously. Training and education prepare Soldiers, leaders, units, and Civilians to operate in this dynamic environment while preparing for tomorrow's challenges. Commanders and units cannot achieve training objectives without robust capability throughout the supporting training and education enterprise that generates and develops skilled, educated individual Soldiers. Proponents develop training and education standards and strategies, and also manage resources through enabling ATIS capabilities.

Legacy training information systems are disparate, stove-piped, and do not effectively share information with each other or interface with non-training systems. Users often enter the same information in multiple systems. Current systems do not provide a common operational picture (COP) of the training and education environment to enable persistent, consistent access to the information and products necessary to support readiness to meet emerging threats. Doctrine, policy, and modernization efforts are evolving rapidly, but adapting 28 legacy systems—each with separate governance and funding constraints—risks the Army's ability to train as it fights and fully support training and leader development as defined in FM 7-0. Lack of a training COP also limits adherence to the Army Learning Model principles specified in TRADOC Regulation 350-70.

Table 2 identifies critical and high-risk capability gaps for training and education information capabilities across the three training domains (Operational, Institutional and Self Development). Current legacy systems do not provide solutions for these gaps. In some cases, authoritative data from other Army systems can create gaps (force structure for echelons below company) or problems that legacy systems and ATIS must solve. The matrix also contains cross-domain gaps (ex. Usability) that span one or more domains. See expanded list in Appendix H which includes moderate risk gaps and alignment to Business Use Case (BUC) requirements, as applicable. (See legend below gap list for code explanations).

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Table 2: Critical & High-Risk ATIS T&E Capability Gaps

Critical & High-Risk - Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area
		Oper	Inst	Self	C/S	
Current training capabilities lack integrated and interoperable planning tools that facilitate top-down guidance and bottom-up planning that produces resourced and actionable unit training plans. (C)	C	P	S			M S
Current training calendars and scheduling tools do not provide visibility of availability for land, range, and facility, PODS or allocations of TADSS and ammunition that influence unit training plans. (C)	C	P	S			S
Legacy training information systems lack centralized, comprehensive training records and analysis tools to support talent management (C)	C	P	P	P		M
The Army lacks an enterprise scheduling capability resulting in 13 different systems with limited data sharing, integration, and redundant information (C)	C	P	P			S
The Army lacks automation for training ammunition ordering between units and ammunition supply points which increases admin time and risks for human error (C)	C	P	P			R S
Soldiers enter the same data in multiple training and education systems which increases administrative burden and risk of conflicting information across systems (C)	C				P	E
Current Army T&E systems are not user friendly or intuitive and are cumbersome to learn and manpower intensive to support. (C)	C				P	M
Current operational applications are not leveraging automated Army Organization UIC force structure data below the company level (platoons, squad, etc.) and instead use manual workarounds to arrange personnel into derivative, small units to facilitate training and resource management. (C)	C				P	E
Current training capabilities lack the ability to view appropriate training data across echelon to inform training decisions at all levels. (H)	H	P	S			M
Current training information capabilities lack ability to view and synchronize calendars/schedules across formations and with adjacent units to facilitate cross functional and multi-echelon training opportunities (H)	H	P	S			M S
Unit training calendars lack selectable data overlays which limit user ability to deconflict or conduct comparative analysis that affect training plans and schedules (H)	H	P	S			S M
The Army has limited ability to conduct analysis and design of individual and collective training products which causes disconnects between related or nested tasks and training strategies (H)	H	S	P			D

Critical & High-Risk - Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area
		Oper	Inst	Self	C/S	
The Army lacks a distributed learning courseware authoring capability (H)	H		P		P	D
Army learners have limited mobile hand-held Bring Your Own Device (BYOD) access options and products that are built using responsive web design scalable to display screen size (H)	H				P	C
Army COMPO 2 and 3 users have limited mobile, web-enabled commercial (BYOD) access options for T&E self-development opportunities and completion of mandatory training requirements (H)	H				P	C
The Army has limited visibility of installation training support assets (inventory) results in direct coordination with peer units, Training Support Centers, and Range Operations (H)	H				P	S
Current T&E systems provide limited mobile access/review of training products and capture of training outcomes at training sites on/off network at the point of need (H)	H				P	M
*Classified Info Gap: The Army lacks a training development capability to develop, manage, and distribute classified (secret and above) learning products (H)	H	S	P			D
*Classified Info Gap: The Army lacks a classified (secret and above) T&E information training management capability to record, track, and manage training outcomes and data, including aggregate reports that indicate training readiness levels (H)	H	S	P			M

Table Code Descriptions:
1) Risk to Army T&E ratings = C- Critical, H- High, and M- Moderate
2) Training Domain = Oper- Operational, Inst- Institutional, Self- Self Development // plus C/S = common/shared
3) T&E domain linkage = P- primary and S- secondary impacts (note that multiple can be primary)
4) ATIS Capability Area = M- Training Management, S- Scheduling, R- Resource Management, D- Training Development, C- Army Learning Content Management, E- Enterprise Architecture, Standards and Services

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1.2. Problem Description and Context

Training and Education (T&E) is a key enabler of the Army's mission -- preparing Soldiers, leaders, and units to accomplish current operations today while preparing for tomorrow's challenges. New approaches in how the Army fights require corresponding adaptations in how the Army trains. T&E systems must be adaptable and responsive to change in the operational environment and keep pace with DoD and Army modernization initiatives. Leaders at all echelons need trusted T&E information to establish a shared understanding of readiness and potential deficiencies. ATIS—not individual users—should interact with other Army Management processes/systems, such as Human Resources Management, Real Property Management, Ammunition Management, Equipment and Supply Management, etc. Legacy systems impose a huge administrative burden on units, especially at the Company level. Commanders have repeatedly noted they seek relief. Higher headquarters continue to struggle tasking and recording mandatory training throughout the force. Command and staff elements lack central access to trusted T&E information sources and are forced to survey units with spreadsheets instead of data queries.

1.3. Root Cause Analysis

The Army's current training and education processes were developed prior to the establishment of the ATIS PoR capability and with no integration with other Army Enterprise Resource Planning (ERP) systems. The mix of current systems has limited-to-no linkage between either business processes or common data required for Army Learning Environment (ALE) End-to-End (E2E) management. The current systems and processes use disparate, unsynchronized, and individual data sets that adversely impact enterprise modernization.

1.3.1. Portfolio of Investments BMA T&R Domain

Table 3 identifies the primary Army IT systems that comprise the Army Training Information System (ATIS) portfolio within the Training & Readiness (T&R) domain of the BMA.

Table 3: ATIS Portfolio of IT Investments (BMA T&R Domain)

#	System Acronym	System Name	Command Proponent
1	ALMS	Distributed Learning System (DLS) - Army Learning Management System	TRADOC
2	ARTIMS*	Army Training Information Management System	FORSCOM G-3
3	ATIA	Army Training Information Architecture (ATIA) Legacy	TRADOC
4	ATLAS	Army Training and Learning Assessment System	TRADOC
5	ATMS	Army Training Management System	TRADOC
6	ECDC	Enterprise Content Development Capability	TRADOC
7	ESC	Enterprise Scheduling Capability	TRADOC
8	IDMS	Inventory and Distribution Management System	TRADOC
9	LLC*	Lifelong Learning Center	TRADOC
10	RFMSS	Range Facility Management Support System	TRADOC
11	SMS - CGSC	Student Management System-Command & General Staff College	TRADOC
12	SRP GIS TK	Sustainable Range Program Geographic Info System Toolkit	TRADOC
13	SRPP	Sustainable Range Program Web Portal	TRADOC
14	SWT	System Training Plan Writing Tool	TRADOC
15	TDC	Training Development Capability	TRADOC
16	TD2QA	Training and Doctrine Development Quality Assurance Management System	TRADOC
17	TMSS - E	Training Management Scheduling System – Enterprise	TRADOC
18	TSIMS	Training Support Information Management System	TRADOC
19	TS-MATS	Training Support Materiel Armywide Tracking System	TRADOC
20	WebTED	Web Based Total Employee Development System	AMC

*ATIS will subsume only the NIPR instance of ARTIMS and LLC

1.3.2. Portfolio of IT Investments BMA non-T&R Domain

Table 4 identifies the primary Army IT systems that comprise the Army Training Information System (ATIS) portfolio outside of the Training & Readiness (T&R) domain of the BMA.

Table 4: ATIS Portfolio of IT Investments (BMA non-T&R Domain)

#	System Acronym	System Name	Command Proponent	BMA Domain
1	ACT*	Army Career Tracker	TRADOC	HRM
2	AIRS	Army IMCOM Reservation System	IMCOM	IE&E
3	CAMP*	Career Acquisition Management Portal	ASA(ALT)	ACQ
4	SCINI	Senior Commander Installation Needs and Issues	IMCOM	IE&E

*ATIS will subsume partial functionality of ACT and CAMP

1.3.3. Portfolio of IT Investments WMA

Table 5 identifies the primary Army IT systems that comprise the Army Training Information System (ATIS) portfolio within the Training domain of the Warfighter Mission Area (WMA) Portfolio.

Table 5: ATIS Portfolio of IT Investments (WMA)

#	System Acronym	System Name	Command Proponent	WMA Domain
1	ARM	Army Range Mapper - JMTC/TSAE (EUR)	USAREUR	Training
2	DLRS-T	Distributed Learning Reporting and Scheduling Tool	ARNG	Training
3	ATHD	Army Training Help Desk	TRADOC	Training
4	ARTS / GTIMS*	Aviation Resource Training System / Graduate Training Integration Management System	TRADOC	Training

*GTIMS is an Air Force program. ATIS will subsume the Army instance (ARTS) of GTIMS

1.4. Training Information Environment (TIE)

Although these systems provide mission critical functionality across the Training Information Environment (TIE) and exchange data with systems across the DoD enterprise, many of these legacy IT investments were developed without fully documented requirements, most lack acquisition oversight, and many are sustained annually as unfunded requirements. Additionally, the current ATIS portfolio often requires significant manual input and manipulation of data, which impacts the timeliness and accuracy of information to support senior leader risk-informed decisions. This approach is neither reliable nor cost effective. Each system was developed independently and operates in a stove-piped fashion. Few of the systems are currently using cloud hosting technologies, and many of these systems present risks, and sometimes vulnerabilities, with respect to cyber security compliance. The Army lacks a common operating picture of the Army training and education enterprise because of the current stove-piped nature of the current ATIS portfolio.

1.5. Capability Gaps from ATIS CBA

In January 2008, TRADOC DCG approved adoption of sixteen Army training and education information capability gaps shown in Appendix H. TRADOC deems the operational risk of these unmitigated capability gaps to be unacceptable. This adoption also allows analysis of materiel and non-materiel approaches to close or mitigate some or all of the identified capability gaps. In addition to the 16 CBA gaps that from the baseline for the ATIS PoR, identified 53 other (recently vetted) gaps which were aligned to scope requirements needs into the six ATIS capability areas. Table 2 above lists additional critical and high-risk level gaps.

1.6. Alignment to Army–Business Enterprise Architecture (A-BEA)

A foundational need for the Objective ATIS enduring solution will be Army Learning Environment (ALE) workflow automation and orchestration to eliminate redundant business processes, reduce niche silo developments, manually intensive workarounds and data table manipulations. ALE's End-to-End (E2E) consists of 5 sub-processes as shown in Figure 1. ALE is unique in that its "As Is" state spans both BMA and WMA; and It is tri-governed and centrally managed by three different "co-process champions" from HQDA G-3/5/7 DOT, PEO EIS, and CAC-T. There is a deliberate alignment of ALE to the A-BEA captured within the BMA Training and Readiness (T&R) Domain Operational Activity (OA) Hierarchy. Following the A-BEA ensures that ALE is: (a) following the prescriptive methodology set forth; (b) compliant with policy standards; and (c) consistent across BMA enterprise architecture. Developing ALE E2E business process in this manner supports a full range of enterprise touchpoints, including architecture-based analysis of the Army portfolios, shaping functional requirements, and guiding materiel and non-materiel functional solution designs. The objective ATIS E2E nests into the Deploy-to-Redeploy/Retrograde (D2RR) E2E architecture for training and training readiness alignments in the FY23 Investment Decision Memorandum (IDM) cycle. Business Capability Acquisition Cycle (BCAC) architecture follows DoDAF v2.02 primitives as implemented by the Army Office of Business Transformation (A-OBT) Enterprise Knowledge Repository (EKR) tool called ARIS (Connect or Model Design). (See Appendix D for more details).

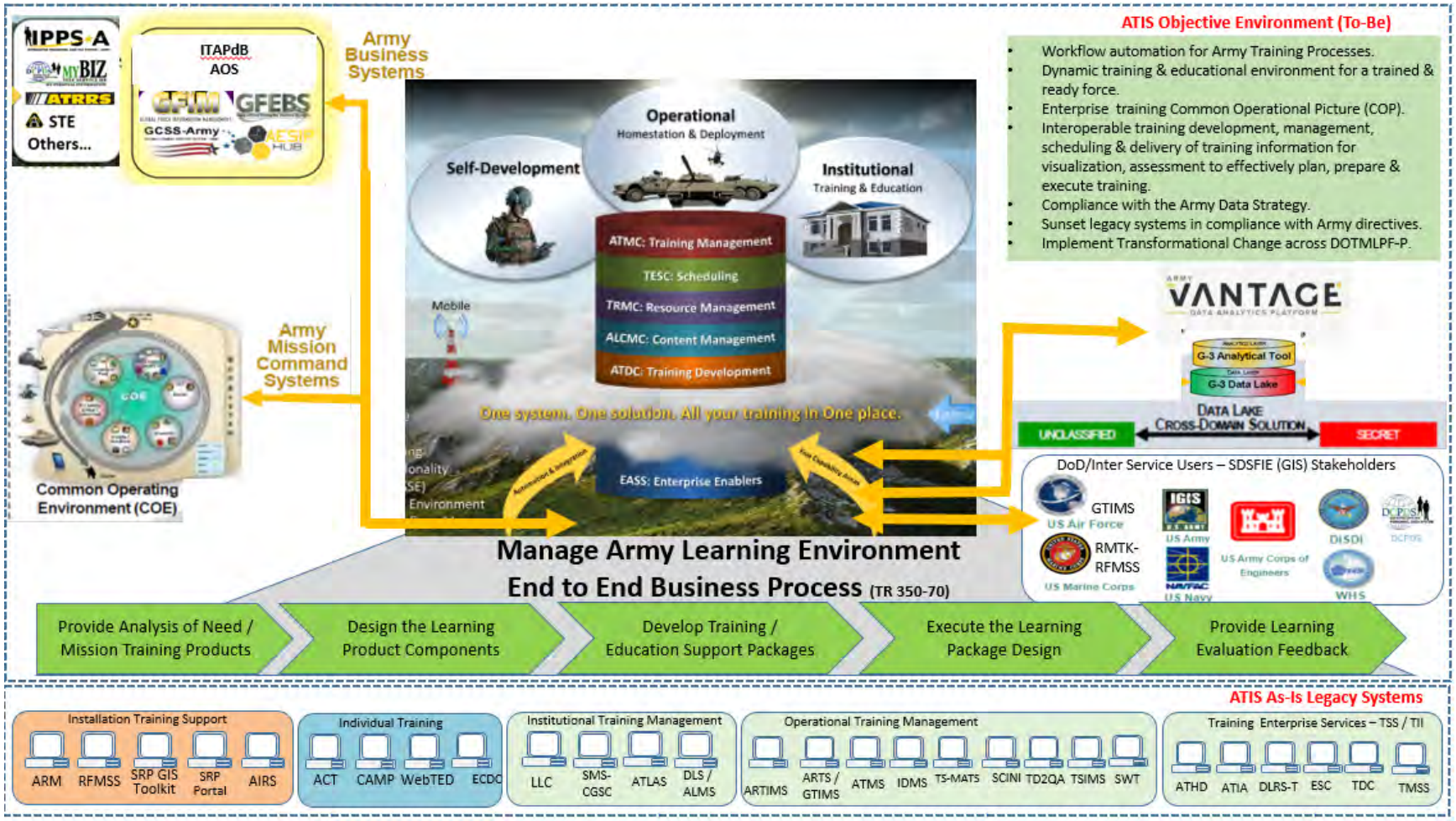

Figure 1: Army Learning Environment End-to-End Business Process

1.7. High-Level Outcomes (HLOs)

Table 6 describes the High-Level Outcomes for the desired solution as pictured in Figure 1 above. Successful implementation of the high-level outcomes results in streamlined training and education information sharing.

Table 6: Objective ATIS High-Level Outcomes (HLOs)

HLO-ID	HLO Short Title	HLO Description
HLO-1	Build Agile and Secure Information Capabilities	Implement sharing of training data, information, and services. Enables a secure sharing environment that supports war fighting, business, intelligence, and enterprise information environment for Army training and education
HLO-2	Re-engineer/Use End-to-End Business Processes	Streamlines Army BMA portfolio of training and education systems that (currently) provides the (objective) ATIS core capabilities while reducing amount of dollars currently being spent
HLO-3	Business Value	Elimination of redundant systems and consolidation of training and education support capabilities into a single enterprise yields: cost avoidance via simplified program and fiscal management, time savings via ease of use which reduces administration burden and increases time to train, and alignment of T&E information with Army and DoD modernization initiatives
HLO-4	Efficient, Effective, easy to use tools	Single sign on, intuitive help, streamlined access to data, something Soldiers will actually want to use, and empower subordinates with greater access to information
HLO-5	Data-Centric Army	Data as ammunition—must comply with DoD VAULTIS factors—and be accurate, secure, auditable, and available in near real-time. Improved discoverability including historical data, accessibility, and interpretability to empower leaders with decision making tools via data analytics, machine learning, etc.

2. Document Relevant Laws, Regulations and Policies (LRP)

Appendix B provides an initial list of possible LRP requirements related to the implementation of Objective ATIS. This list shapes the scope of the problem and it may be determined that LRP requirements need to be changed or waived in order to solve the user's need/problem. Initial analysis indicates there are likely no LRP requirements that will complicate the implementation of ATIS. However, as the ATIS capability evolves, certain LRPs may need to be updated or waived in order to enable opportunity for achievement of the ATIS goals and objectives. Additionally, TPO ATIS will identify, and request revision of regulations, policy and other guidance affected by ATIS implementation and subsumption of information systems. This may include interim notification to Army organizations via HQDA EXORD.

3. Determine Future Business Capabilities (Requirements)

3.1. Components of the Solution

The Army Training Information System (ATIS) establishes an enterprise training and education management solution that integrates multiple, disparate legacy training and education capabilities to provide commanders, leaders, commandants, and resource owners a single automation capability to support the entire training and education information enterprise. ATIS provides capability to operationalize Field Manual 7-0, Army Regulation 350-1, and TRADOC Regulation 350-70, and automates planning and preparing, executing, evaluation and assessment. The system integrates and consolidates all training and education enterprise functions that enable the Army to train and educate competent Soldiers, Civilians and leaders in the operational, institutional and self-development domains, while building lethal and proficient units. ATIS does this through other integrated capability areas: Learning Content Management, Training Development, Training Enterprise Scheduling, and Training Resource Management.

ATIS subsumes, modernizes and replaces the existing training capabilities/functions of multiple “legacy” training information systems. ATIS will put all training and education information in a single enterprise system and provide seamless interfaces with other systems (IPPS-A, GCSS-A, Vantage, GFIM, etc.). ATIS will be a single sign-on, 24x7 availability, enterprise system containing functionality that provides all COMPOs, unit commanders, individuals and institutions with one place to manage, develop, schedule, report, execute, and deliver Army training and education resources and records—to include Army Civilian professionals, sister services and mission partners. ATIS serves all Active, National Guard and Army Reserve Soldiers, Army Civilian Professionals and contractors, as well as elements from other mission partners. Improved training and education tools enable better recruitment, retention, development and transition of Soldiers and Civilians.

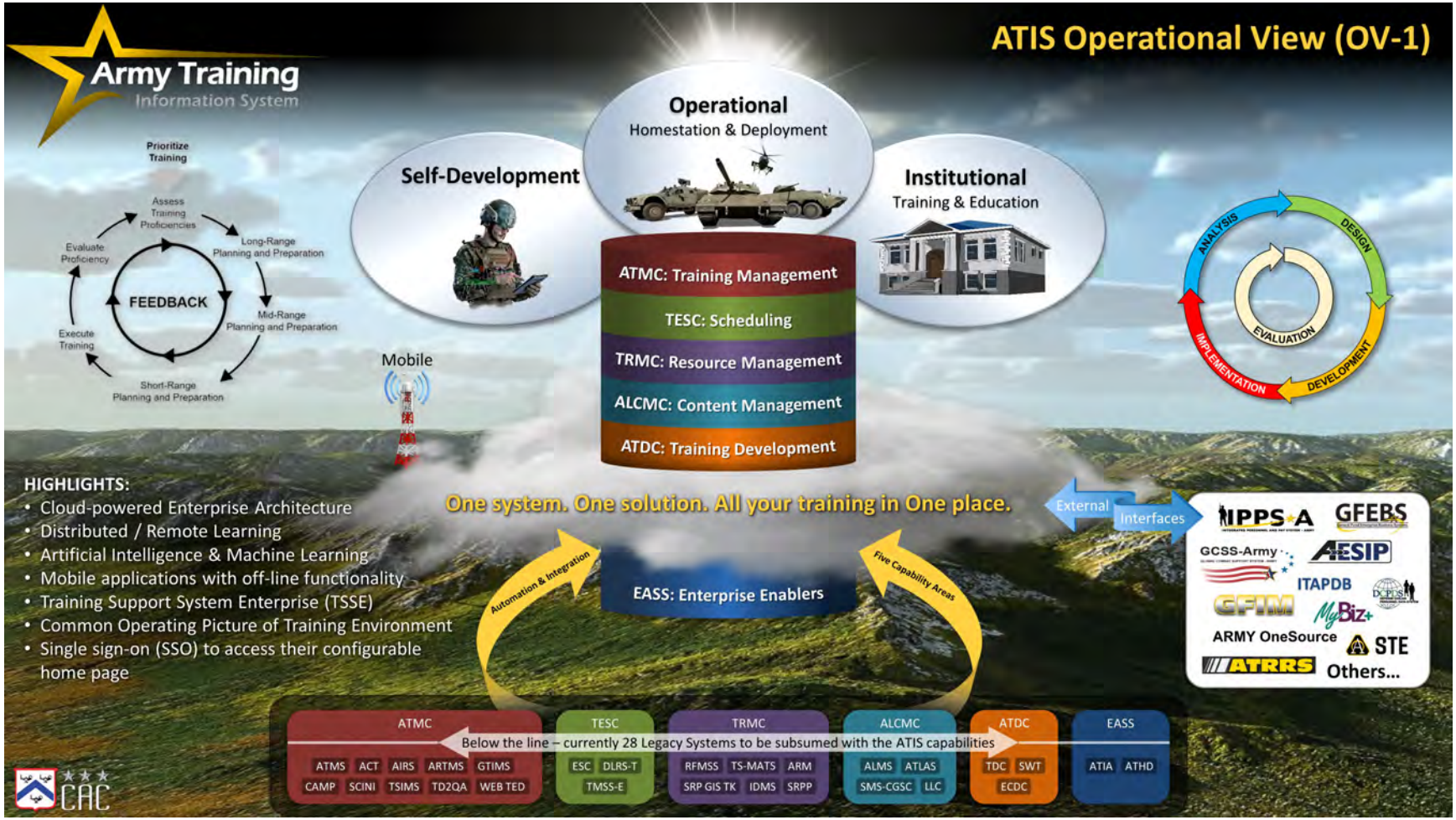

Figure 2: Objective ATIS Operational View

3.2. Six Capability Areas

Objective ATIS meets the goal of delivering an automated, integrated, and interoperable enterprise environment combining training and education data to meet Training and Readiness requirements. The ATIS solution is a single enterprise system organized into six capability areas. See below for descriptions of the capability areas. Section 5 provides further detail on objective ATIS capabilities upon Full Deployment (FD). Note that FD in DBS acquisition is equivalent to Full Operational Capability (FOC) in materiel focused development.

3.2.1. Army Training Management Capability (ATMC)

The integrated functionality of ATMC enables leaders at all echelons to facilitate the Training Management Cycle as prescribed in AR 350-1 and TRADOC Reg 350-70, Army Learning Policy and Systems to plan and prepare, execute, evaluate and assess training and education. ATMC enhances the ability of leaders to conduct operational and institutional training management and incorporates self-development for individuals and leaders. Examples include grade book / training records (individual and unit), training strategies/guidance, student management services, registrar functions, live-fire operations, after action reviews / feedback, and virtual campus.

3.2.2. Training Enterprise Scheduling Capability (TESC)

The TESC is calendar centric and provides shareable, reusable training calendars with drag and drop capability. For operational units and leaders, ATIS will build training events and exercises. ATIS interfaces with ATRRS to schedule/select courses. The scheduling capability assists in identifying available resources (e.g., classrooms, training areas/ranges, TADSS, facilities, and manpower). The TESC integrates automated reservation staffing/approvals and resource schedule deconfliction recommendations.

3.2.3. Training Resource Management Capability (TRMC)

The TRMC provides centralized visibility of available inventory of training support products, facilities, and services (e.g., training areas/ranges, facilities / classrooms, TADSS, ammunition, and instructors / operators). The TRMC—in conjunction with TESC—will maximize automation requests and staffing/approval routing. The system communicates with the appropriate resource manager through orchestrated workflow—to include resources outside of ATIS (e.g., training areas/ranges, facilities / classrooms, TADSS, ammunition, and instructors / operators). TRMC captures and maintains resource utilization during training events from operational, institutional and self-development domains.

3.2.4. Army Training Development Capability (ATDC)

ATDC provides training developers and managers to demonstrate relevance of learning products through the linkage and tracing of related learning products to the standards for Army readiness (e.g., individual and collective tasks / CATS, drills, lesson plans). This includes support for Warfighter Training Support packages. The ATDC provides Army schools, institutions, and TRADOC's TOMA with new analytical tools for decision making and managing people, products, as well as resources. ATDC automates—in conjunction with—EASS—import of information and table data from reference catalogs, FedLog, ammunition, MOS/AOC/ASI, MTO&Es, TADSS, etc. Additionally, ATDC integrates support tools for analysis of job, task, or mission.

3.2.5. Army Learning Content Management Capability (ALCMC)

The Learning Content Management Capability facilitates the cataloging, management and delivery of learning content (remote, distributed and resident) across three training domains: institutional, operational and self-development. Provides tools for group collaboration, gradebook, and knowledge management, management of student populations and lifelong learning for alumni. Individual T&E records will follow learners for the entirety of a federal service career and beyond.

3.2.6. Enterprise Architecture Standards and Services (EASS)

Enterprise services are foundational to all ATIS capabilities to include enterprise web portal, help services, and support for mobile functions. EASS enables data sharing across the Army, Sister Services,

joint commands, and governmental/education communities. It provides the central repository for T&E products and support materials. EASS contains the predictive analysis decision-support tools to enable planning and decision making. Provides individual users a customizable landing page to configure and monitor what T&E information is important to them and receive key notifications and alerts. This allows unit leadership to communicate key T&E information and alerts directly to subordinate members outside of email. Additional details of selected EASS functions are provided below.

3.2.6.1. ATIS Data Architecture

This component of the Objective ATIS capability solution serves as the “Data Layer”. The intent of the architecture is to provide a common data environment that serves as the single consolidation point for all authoritative data supporting the ALE process which currently resides in the systems that comprise the ATIS Portfolio. Subsequent efforts will include all T&E authoritative data, providing all data consumers with a single-entry point and source of authoritative data.

3.2.6.2. ATIS Analytical Tool (AAT) Project

This component of the Objective ATIS capability solution serves as the “Analytics Layer”. The intent of the AAT project is to build advanced and predictive analytical capabilities in-between the data and application layers of the Objective ATIS that will enable the retrieval and integration of disparate data across the training and education enterprise to create an automated common operational picture (COP) for leadership. This effort will provide the ability to rapidly compare disparate datasets, which will better enable analysts to inform and shape courses of action for leadership decisions.

3.3. ATIS Access, functionality and single funding portfolio

The figure 3 depicts logical consolidation of functionality over time based on legacy system owner and SME identified requirements. Systems labeled “Modernizing/Enduring” have unique functionality that can be retained with modernization to comply with hosting, server consolidation, cloud services, data strategy and PII/PHI directives. “Modernizing / Subsumed” group of systems are projected to be sunset upon transition to an objective COTS/GOTS/Enterprise solution that meets the end-state functional capabilities. Common Enterprise capabilities support and provide services to all objective capabilities. The ATIS Enterprise data warehouse houses training and education information to achieve VAULTIS goals of Visible, Accessible, Understandable, Linked, Trustworthy, Interoperable and Secure. See below for overview of current (legacy) system/functional capabilities. More details on desired objective capabilities/functionality are provided in Appendix I System/Functional Capabilities Overview.

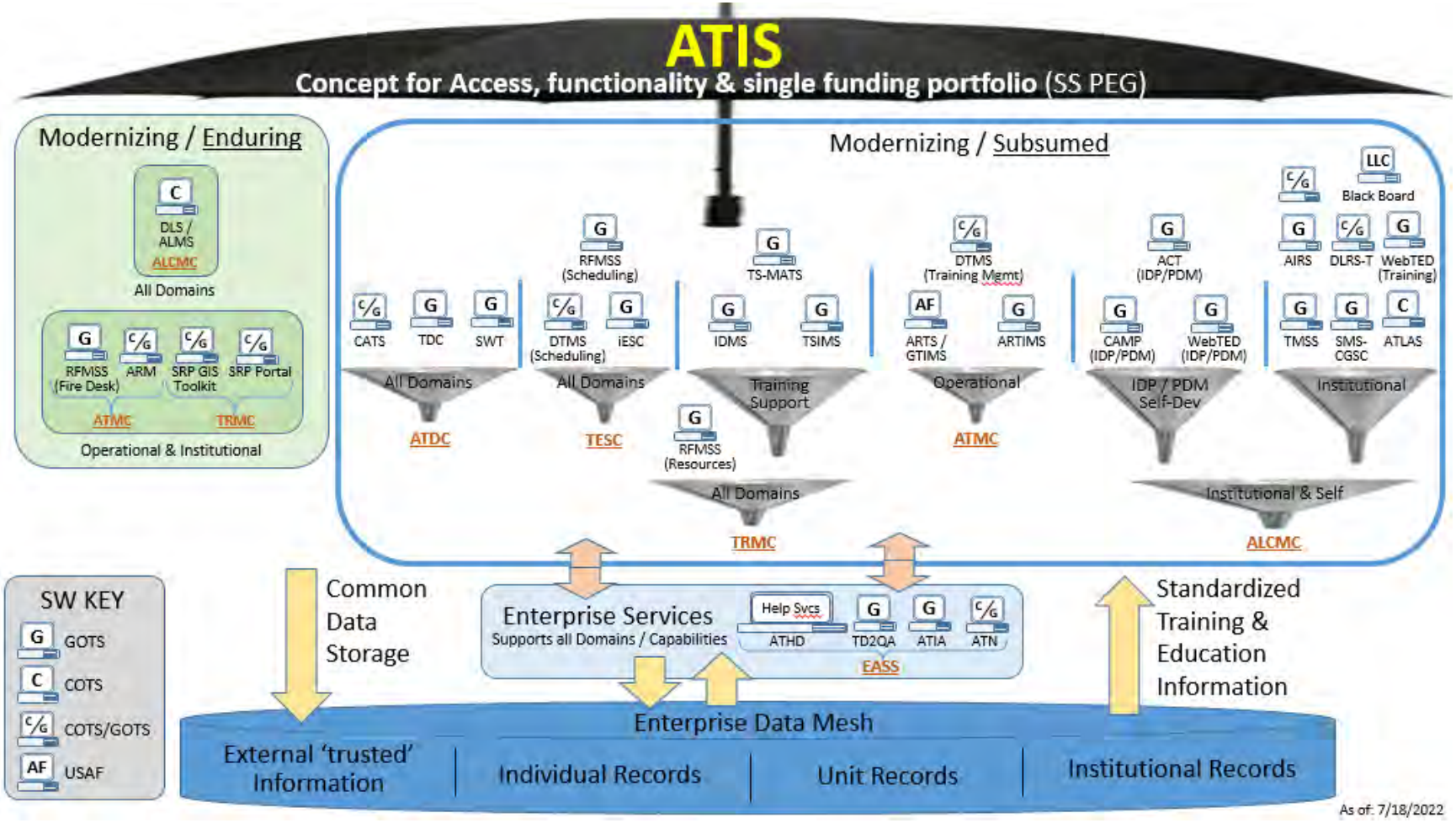

Figure 3: ATIS Access, functionality and single funding portfolio (SS PEG)

3.3.1. Army Career Tracker (ACT) overview

ACT is a Tri-Cohort, Tri-Component, enterprise Leader Development system. ACT Integrates Training, Education, Self-Development, Assignments and Experiential Learning into one personalized, easy-to-use interface. ACT is the Army's system of record for the Individual Development Plan (IDP) and Professional Development Model (PDM)/Career Map. ACT Allows users to manage their life-long learning career objectives and monitor progress towards their career development and goals. NOTE: The ACT sponsorship program capabilities will be retained by the HRM domain and is excluded from ATIS subsumption.

3.3.2. Army IMCOM Registration System (AIRS) overview

AIRS provides on-line registration and management of traffic safety training courses for the Army Traffic Safety Training Program (ATSTP). Note: The AIRS functionality is being hosted and/or subsumed by Army Safety Mgmt Info System (ASMIS) pending ATIS Leadership and TRIAD review.

3.3.3. Army Range Mapper – JMTC/TSAE EUR (ARM) overview

The Army Range Mapper (ARM) is an Army-accredited Enterprise GIS platform on NIPR serving users from the warfighter community, range safety personnel, trainers and training planners across US Army Europe's (USAREUR) area of operations. The USAREUR SRP GIS RSC mission is to create, manage, and distribute authoritative standardized spatial information, products, and services for the execution of training on U.S. Army Europe ranges and training lands. NOTE: SRP's RFMSS and SRP GIS TK are leveraged within the ARM mission.

3.3.4. Army Training Information Management System (ARTIMS) overview

ARTIMS Manages workflow and document decisions for Service Retained ARNG/USAR unit participation in Overseas Deployment Training (ODT). ODT are ASCC/CCMD Sponsored exercises (includes Joint Exercise Program), Joint Training Coordination program (JTCP) and ASCC Mission Support as a training event for the participating unit. ARTIMS mechanizes Army creation, nomination and approval process for Army Overseas Deployment Training (ODT). In ARTIMS ASCC create collective training events, generally based on Joint and ASCC sponsored exercises. These events are suitable to satisfy Army National Guard (ARNG) and U.S. Army Reserve (USAR) Annual Training requirements. ARNG and USAR select units to participate in these events and then are approved. Events will be created in ATMC and then nominated and approved in TESC, which results in an ODT being scheduled for the unit.

3.3.5. ARTS/GTIMS Aviation Resource Training System (ARTS) Graduate Training Integrated Management System (GTIMS) overview

The Aviation Resource Training System (ARTS) is developed by DSA and has been in use by both the U.S. Air Force (USAF) and the U.S. Navy (referred to as the Graduate Training Integrated Management System (GTIMS)) for the past thirteen years. It is a joint venture which allows each service to share the cost as they all benefit the outcome from one complete holistic system. NOTE: ATIS will subsume only the Army instance.

3.3.6. Army Training Help Desk (ATHD) overview

The ATHD is a single point of entry knowledge center consisting of a core group of tier 1 government/contracted training agents assigned to Fort Eustis, VA and approximately 250+ tier 2/3 training support subject matter experts across proponents/agencies. The ATHD provides 24/7 customer support to Soldiers, civilians, and other service members worldwide who require assistance with their distributed learning, specifically the Army Learning Content Management Capability.

3.3.7. Army Training Information Architecture – Legacy Application (ATIA-LA) overview

ATIA-LA (CAR, TAG, MT2, and SIS) provide development, storage, and delivery of Army doctrine and training materials to Soldiers and units anywhere in the world supporting all levels of Army training including training products for all three pillars of Army training (Unit, Institutional, and Self-development). The ATIA legacy applications converge several legacy Army training information systems into a single, integrated, net-centric architecture.

3.3.8. Army Training Management System (ATMS) overview

ATMS is the Army's Enterprise, web-based training management system. It is comprised of the Digital Training Management System (DTMS), Course Manager (CM), the ATMS Development Tool (ADT), the Army Training Network (ATN) and various automated tools. ATMS provides the Operating Force with the capability to manage individual and unit training from squad to Army Service Component Command. It provides Army Proponents with the means to develop and deliver Standard Requirements Code (SRC) Table of Organization and Equipment (TOE)-based, Standardized Mission Essential Task List (METL), Combined Arms Training Strategies (CATS), and weapon training requirements. ATMS also provides the Generating Force the capability to manage student training while attending institutional courses (or Troop Schools) through gradebook automation. ATMS provides HQDA with an enterprise-level, training data sharing service for integration with other systems and business domains. See Appendix I-1 for additional details.

3.3.9. Army University Management System (AUMS) Emerging System overview

The AUMS is a college-wide, fully integrated, dynamic student management system providing administration, course planning, and grade management services for students, faculty, and instructors of all the TRADOC CoE/School supported by Army University (ArmyU). It supports educational and reference needs for resident, non-resident and fielded forces. Functions of the system include: the College Information System (CIS) to automate the College Admissions Process to register students, validate and enroll students into curriculum; College Registrar functions to manage students, course enrollment in curriculum, grade, transcript and Academic. NOTE: AUMS is in development/testing as an emerging replacement for SMS-CGSC.

3.3.10. Career Acquisition Management Portal (CAMP) overview

CAMP is a single sign-on system that provides consolidated access to career management applications and tools for the Army Acquisition Workforce (AAW) and serves as the central authoritative repository housing all of the Army DACM Office applications. The data housed within CAMP is used to meet the reporting, career development, and policy requirements as mandated by the U.S.C Chapter 87 Title 10 and the DODI 5000.66. NOTE: CAMP is divesting IDP/PDM development functions to ATIS and ATIS will provide products back to CAMP for AAW members.

3.3.11. Distributed Learning Reporting and Scheduling Tool (DLRS-T) overview

DLRS-T manages the availability and tracks utilization of the 350 ARNG DL Classrooms nationwide. Its standard Web-based interface provides enterprise-level calendar views of DL Classrooms to include layout, equipment, and services. ARNG's DLP users throughout the States can search, view, and schedule available DL Classrooms. DL managers can view DL Classroom utilization reports.

3.3.12. Distributed Learning System (DLS) overview

DLS provides the information technology for delivery and management of training in support of individual and collective task training. DLS facilitates the Training Mission Area mission to teach technical and tactical proficiency, develop military occupational specialty (MOS) skills, develop Leaders, support Army Training Transformation, Army Force Generation (ARFORGEN) and Lifelong Learning, promote self-development, and sustain individual and unit combat skills. Benefits of DLS include increased training effectiveness and efficiency, improved readiness, and increased training for customers. Key customers: Soldiers (Active, National Guard, and Reserve), Army Civilians. NOTE: ATIS PoR excludes all point of delivery capabilities.

3.3.13. Enterprise Content Development Capability (ECDC) overview

The Enterprise Content Development Capability (ECDC) allows for the reuse of media content Distributed Learning (DL) Interactive Multimedia Instruction (IMI) training content. ECDC enables the cataloging, maintenance and reuse of multimedia assets, learning objects and available training course materials, all within an intuitive, user-friendly, drag-and-drop what you see is what you get (WYSIWYG) browser-based solution that meets, and has been tested against, Army Gold Master computer standards. NOTE: ECDC is no longer in APMS pending its functionality being provided within the ATIS deployment.

3.3.14. Enterprise Scheduling Capability (ESC) overview

ESC is used by the TRADOC Maneuver Center of Excellence (MCoE) to schedule and The ESC gives users and allocators the capability to work together to schedule a full range of training resources; i.e., fuel, ammunition, water, weapons, optics, tactical/combat vehicles, Heavy Equipment Transporter, contact maintenance support, tactical communication support, ranges, classrooms, simulation center assets, transportation, medic support, and non-Programs of Instructions support requests and formal tasking's. NOTE: ESC is sometimes referred to as the interim Enterprise Scheduling Capability (iESC).

3.3.15. Inventory and Distribution Management System (IDMS) overview

IDMS is a web-based system, networked Information Technology application, that retrieves data from a legacy inventory system. IDMS maintains inventory/invoicing information for Army Training Support Center training products. The web ordering system is used by Department of Defense customers outside the Army and customer agencies outside DoD to order and receive training products replicated and distributed by ATSC.

3.3.16. Lifelong Learning Center (LLC) overview

The Lifelong Learning Centers (LLC) provide the capability to create, store, manage, and deliver training content to resident and non-resident students. The LLCs were created to meet the TRADOC Commander's guidance for an adaptive, agile learning environment by providing learners access to training material, enabling their continued learning even when away from the schoolhouse environment. The LLCs provide an on-demand reach-back and push-forward capability, bridging the gap between the three training domains: resident, operational, and self-development.

3.3.17. Range Facility Management Support System (RFMSS) overview

The Range Facility Management Support System (RFMSS) is designed to support operational and generating force training management. RFMSS simplifies and enhances the process of range and training facility scheduling and training management functions at US Army, US Army National Guard, US Army Reserve, US Navy, and US Marine Corps installations/bases. RFMSS assists installation staff in accounting for and managing all phases of unit training. RFMSS is required to maintain current status of all range activities. RFMSS includes the RFMSS Training Visibility System (RTVS), RFMSS Ad Hoc Query Tool, and several interfaces to other systems. See Appendix I-2 for additional details.

3.3.18. SCINI IMCOM (SCINI IMCOM) overview

SCINI is a tool for gathering, consolidating, tracking, and documenting installation SC-prioritized TSS training Needs and Issues. NOTE: SCINI IMCOM is no longer in APMS pending its functionality being provided within the ATIS deployment.

3.3.19. Student Management System–Command & General Staff College (SMS-CGSC) overview

The Student Management System is a college-wide, fully integrated, dynamic information management system providing administration, course planning, and grade management services for students, faculty, and instructors for the schools supported by Army University (ArmyU). It supports educational and reference needs for resident, non-resident and fielded forces. Functions of the system include: the College Information System (CIS) to automate the College Admissions Process to register students, validate and enroll students into curriculum; College Registrar functions to manage students, course enrollment in curriculum, grade, transcript and Academic.

3.3.20. Sustainable Range Program (SRP) Geographic Information System (GIS) Toolkit (SRP GIS TK) overview

The SRP GIS Toolkit provides geospatial tools that support the Integrated Training Area Management (ITAM) program and the Range Program. Specific geospatial tools include the Range Managers Toolkit (RMTK), the Military Installation Map Toolkit (MIMT), and the Army Metadata Editor Tool (AMET). Specific tools within the RMTK that generate danger zones for ground to ground, air to ground, laser, and explosive training are the Surface Danger Zone (SDZ) Tool, the Weapon Danger Zone (WDZ) Tool, the

Laser Range Management Tool (LRMT), and the Explosive Training Range (ETR) Tool. NOTE: SRP GIS TK are extensions of the Esri COTS application. Esri complies with the DoD SDSFIE (GIS) data conventions. See Appendix I-2 for additional details.

3.3.21. Sustainable Range Program (SRP) Web Portal (SRPP) overview

The SRP includes the SRP Web Portal; Army Range Requirements Model (ARRM); Range Complex Master Plan Tool (RCMPT); MILCON Dashboard; Enterprise Data Warehouse (EDW); Range Officer Professional Development (ROPD); Range Facility Management Support System (RFMSS) for Firedesk, Resources, Range Configuration Control Board Website (RCCBWeb) and scheduling; and Geographic Information System (GIS) Tool Kit (TK). Appendix I-2 provides additional details on gaps, system interdependencies, and expanded content in terms of ATIS capability areas. See Appendix I-2 for additional details.

3.3.22. System Training Plan (STRAP) Writing Tool (SWT) overview

SWT is a web-based program that provides streamlined efficiency in STRAP initiation, development, coordination, and approval processes. SWT's embedded Electronic Performance Support System and training tool, as well as its collaborative feature, facilitate enhanced STRAP document quality Army-wide. Users input STRAP content, comments, and recommendation on STRAP to capture training/training support requirements for system/ non-system training across institutional, operational and self-development domains.

3.3.23. Training and Doctrine Development Quality Assurance Management System (TD2QA) overview

Training and Doctrine Development Quality Assurance Management System (TD2QA) allows users from Training (TD), Doctrine (DD) and Quality Assurance (QA) to identify workload products and evaluate and certify standards of TD/DD/QA in Army units. TD2QA does not provide authoritative data. NOTE: TD2QA functionality is hosted by TRMIS pending its functionality being provided within the ATIS deployment.

3.3.24. Training Development Capability (TDC) overview

TDC provide Training Developers at Army schools the tools to manage individual and collective training, support the analysis, design and development of task-based training products such as: Soldier Training Publications, Training Support Packages, Combined Arms Training Strategies, Programs of Instruction, and Courses. TDC is integrated with the Army Training Information Architecture (ATIA) Legacy Application and other key Army training management systems.

3.3.25. Training Management Scheduling System (TMSS) overview

TMSS is used to schedule classrooms and resources across COE area of operations. It has an automated ability to schedule and manage the FCoE's ADA and FA training load. This ability allows FCoE to efficiently manage facilities and resources throughout the SMDR/TRAP process and adjust during execution. The FCoE manages in excess of 500 classrooms supporting an annual student load at 20,000 students.

3.3.26. Training Support Information Management System (TSIMS) overview

Provides a cross-program, common operating picture of training enablers across all domains in support of the Army training model, training readiness, and managing training support. It provides total asset visibility, facilitates an integrated capabilities-based management process, and allows users to track training products, services, and facilities. It identifies training gaps and redundancies, facilitates redistribution of assets to mitigate shortfalls, and facilities training enabler life cycle management. It is the repository of TSS Program Mission Essential Requirements (MER), the authoritative source of the TSS Master Plan, and provides empirical data to inform the HQDA TSS Theater In-Progress Reviews (IPR) and TSS Program Objective Memorandum (POM).

3.3.27. Training Support-Materiel Armywide Tracking System (TS-MATS) overview

TS-MATS provides complete, real-time, up-to-date inventory management of TADSS with information on their description, capabilities, limitations, employment considerations, and locations at sixty-nine Training

Support Centers (TSC), enabling the temporary loan of TADSS to Soldiers. TS-MATS supports the ACOMs, ASCCs, and DRUs

3.3.28. Web Based Total Employee Development System (Web TED) overview

The Web based Total Employee Development (TED) system is a paperless training tool used by Army Material Command (AMC) Headquarters as an Enterprise Training Tracking System for all AMC personnel. TED is also used by over 20 Non-AMC organizations to include HQDA G4, USACE, and most of the ASA(ALT) PEOs. AMC has directed training management in TED for both Logistics Modernization Program (LMP) and mandatory training. WebTED provides an individual the capability to create or maintain an Individual Development Plan (IDP) that links experiential assignments to individual learning portfolio records that enables the Professional Development Module (PDM) to identify career progression and recommended individual learning for the next level of responsibility. WebTED reports an excess of 150K mix of both Acquisition Corp and non-acquisition users (across Army AMC, USMC, and various Local Nationals). TED Supervisors have the ability to input IDP for employees without IT assets in their work areas.

3.4. ATIS Enterprise Data Services

ATIS data interfaces provide external systems with authoritative ATIS data and automated capabilities to provide consistency across army systems, reduce duplication of work. ATIS EASS provides a series of application programmer interfaces (APIs) for exchanging authoritative training data. The APIs use a Representational State Transfer (REST) architecture implementing the four CRUD operations (Create, Retrieve, Update, and Delete). REST APIs have a low barrier to entry for external systems to exchange data with the ATIS enterprise architecture. Figure 4 illustrates authoritative data available through the enterprise data services.

3.4.1. Data Formats

ATIS users will access data resources in appropriate human-readable formats (HTML, PDF, Word, etc.) External systems have access to human readable and machine-readable formats (XML, JSON, etc.) Most ATIS data resources will be available in multiple formats to maintain a capability consistency between ATIS users and external systems.

3.4.2. Learning Record Store

Soldier and student training and education records utilize a learning record store (LRS) implementing the experience API (xAPI) standard. This standard combined learner experiences at a variety of levels, fidelity, and sources to build a complete picture training and education.

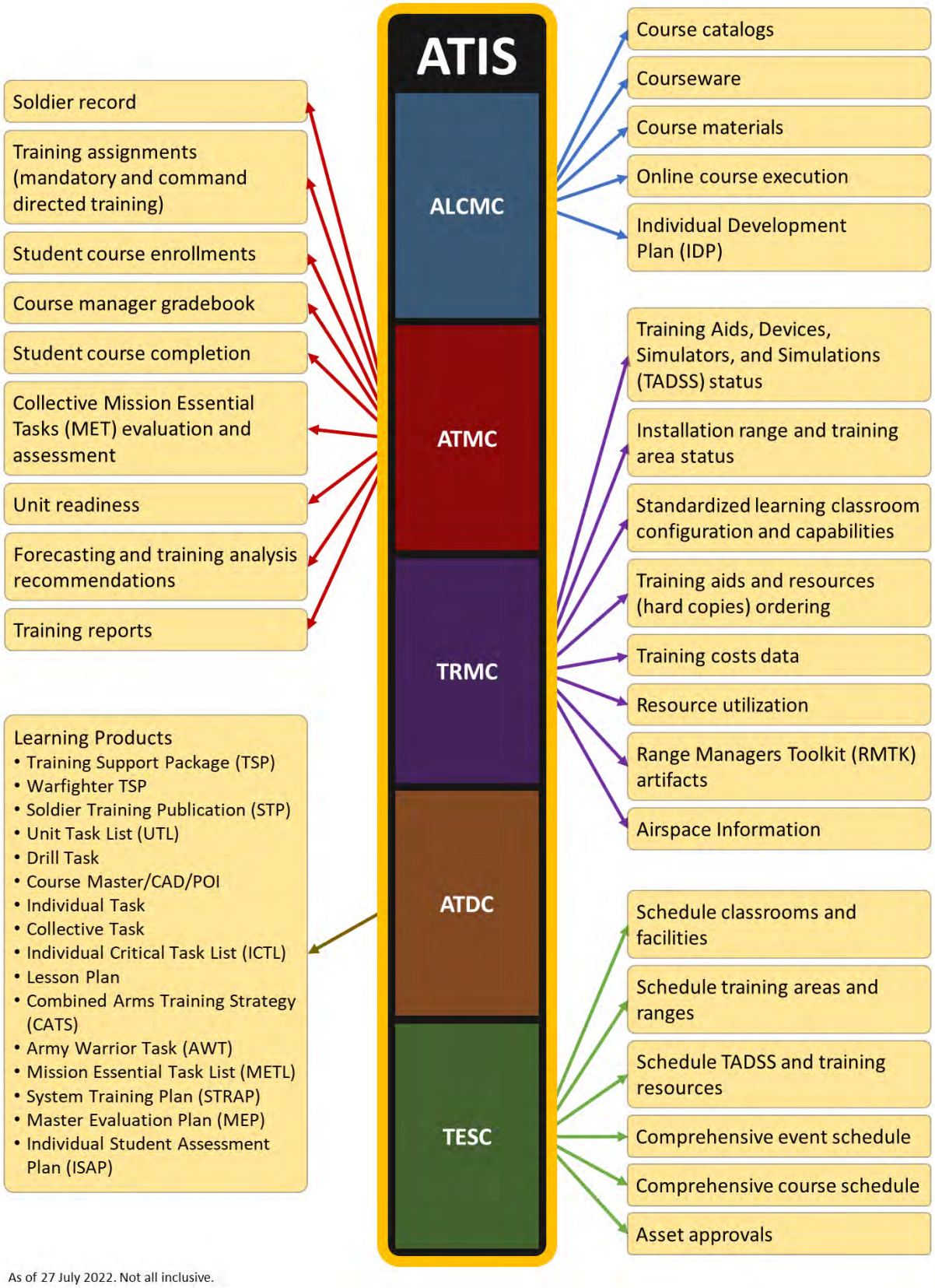

Figure 4: ATIS Enterprise Data Services

3.4.3. ATMC Enterprise Data Services

ATMC provides the Soldier, student, and unit centric training records. It supports the three operational domains by collecting/providing profile data, training, and educational records of Soldiers/students and collective data for units. This API utilizes the REST and xAPI standards.

This interface provides read/write (CRUD) operations. To maintain the authoritative nature of the data, write permission is limited to particular roles with permissions appropriate to authorized individuals. These APIs also have controls on reading ATMC data which is typically CUI.

- Soldier record
  - ACFT
  - Body composition
  - Height/weight
  - Weapons qualification
  - Task evaluation (ICTL, AWT, etc.)
  - Crew qualification and performance data
- Weapons assignment (I/CS/P)
- Training assignments (mandatory and command directed training)
- Student course Enrollments
- Course Manager Gradebook
- Student course completion
  - Individual learning completion – This area supports self-development and Institutional training domains
  - Individual training assessments – This area supports operational training domain
  - Military and Civilian transcript
  - Continuing Learning Points
- Collective Mission Essential Tasks (MET) evaluation/assessment
- Unit Training Readiness data feed
- Forecasting and training analysis recommendations
- Training reports
  - Lessons Learned
  - After Action Report (AAR)s

3.4.4. ATDC Enterprise Data Services

ATDC provides the digital learning training products required to execute training and education. The API provides read/write access (CRUD) to training documents. Most ATIS user roles will be restricted to Read-only access of completed (validated/approved) ATDC documents. Write access and read access to draft documents are restricted to training development roles. All completed training materials are available in human-readable (PDF, Word, etc.) and machine readable (XML, JSON) formats.

- Learning Products – TRADOC Reg 350-70 / Field Manual 7-0
  - Individual Training Support Package (ITSP)
  - Warfighter Training Support Package (WTSP)
  - Soldier Training Publication (STP)
  - Unit Task List (UTL)
  - Drill Tasks
  - Course Master
  - Course Administrative Data (CAD)
  - Program of Instruction (POI)
  - Individual Student Assessment Plan (ISAP)
  - Master Evaluation Plan (MEP)
  - Individual Task
  - Collective task
  - Individual Critical Task List (ICTL)
  - Lesson Plan

- Combined Arms Training Strategy (CATS)
- Army Warrior Task (AWT)
- Data Maintenance Tables
- Training Developer Workload Estimate
- Mission Essential Task List (METL)
- System Training Plan (STRAP)

3.4.5. ALCMC Enterprise Data Services

ALCMC provides online training course catalogs, registration, and online training. The reference data for online learning management such as the course catalog will follow the ATIS REST architecture CRUD model. COTS Learning Management System (LMS) will provide execution of online training courseware utilizing SCORM and xAPI standards.

- Course catalog
- Course Ware
- Course Materials
- Online Course Execution
- Individual Development Plan (IDP)

3.4.6. TRMC Enterprise Data Services

TRMC provides data on TADSS (Training Aids, Devices, Simulators, and Simulations), ranges, training areas, classrooms, and facilities. The training resource data is available in both human readable and machine-readable formats.

- TADSS status
  - TADSS catalog and availability (includes location)
  - TADSS utilization
- Installation range and training area status
  - Range and Training Area requirements
  - Range and training area inventory and availability
  - Range and training area utilization
  - Explosive ordnance information
- Standardized Learning Classroom Configuration and Capabilities
- Training aids and resources (hard copies) ordering
- Training costs data – shipping, purchase, and manufacturing/fabrication costs, not costs per use (not authoritative source for costs, except perhaps TRADOC produced devices)

3.4.7. TESC Enterprise Data Services

TESC provides scheduling and reservations of training resources including classrooms, facilities, ranges, training areas, and TADSS. The scheduling capability provides current available and accepts schedule requests attached to training events and courses. An event resource provides the schedule of all resources associated with a training event, appropriate for building a comprehensive calendar.

- Schedule classrooms and facilities
- Schedule training areas and ranges
- Schedule TADSS and training resources
- Comprehensive event schedule – associated with training course or series of events
- Comprehensive course schedule
- Asset approvals

3.5. ATIS Potential System Data Interfaces

See figure 5 for ATIS System Interfaces. ATIS expects to interface with at least 81 external systems. Some interfaces are bi-directional. Approximately 54 interfaces will have inbound data to provide ATIS with reference or training/personnel records. ATIS will have about 48 outbound data transfers to provide authoritative data to external systems. The number of outbound data transfers will grow throughout ATIS development and sustainment. ATIS will share its authoritative data through a general-purpose API (application programming interface) to maximize data consistency, improve documentation, minimize costs, and minimize time to establish system connections. The establishment of common interfaces and publication of technical documentation allows technical work in parallel with governance processes. The common general-purpose interface provides consistent ATIS data to multiple external systems, reports, and the user interface. External systems will have access to all data permitted by their memorandum of agreement (MOA) and interconnection security agreement (ISA) reducing the amount of rework and revisions. Data Use Agreements, ISAs and other data sharing agreements will be vetted and coordinated through the G-3 Data Steward. All authoritative ATIS data in a final or approved status should be available via the common general-purpose API upon completion of an MOA and ISA. See additional details on interfaces in appendix G, Table 20 for data provided by ATIS to external systems and Table 21 for data collected by ATIS from external systems.

3.6. Critical/Key external system interface requirements overview

3.6.1. Authoritative Data needed by ATIS

3.6.1.1. Integrated Personnel and Pay System - Army (IPPS-A)

ATIS needs the ability to map Soldier / Civilian data to complete the roster for a unit or an organization. IPPS-A also provides key master table data for key concepts such as Military Occupational Specialties, Additional Skill Identifiers, and Special Qualification Identifiers.

3.6.1.2. Army Organization Server (AOS) / Global Force Information Management (GFIM) OE

ATIS will obtain Army force structure data from AOS in the form of TDA and TOE/MTOE/UIC/GFMID data to provide baseline unit organization and hierarchy data down to the individual billet.

3.6.1.3. Synthetic Training Environment (STE)

ATIS will leverage STE information to obtain individual and collective task assessments for events that were conducted within the STE. Intent is to leverage actionable data that informs Soldier and unit readiness based on the After-Action Report and lessons learned from the STE.

3.6.1.4. Army Force Generation Synchronization Tool Set (AST) / GFIM

ATIS will leverage AST data to inform training guidance in support of training management functions

3.6.2. Authoritative Data provided by ATIS:

3.6.2.1. IPPS-A

ATIS will provide the Individual Training Record/ Enterprise Army Learner Record to inform IPPS-A in the areas of talent management, height/weight, ACFT, weapons qualification, course completions and other actionable data of interest to the G1 community.

3.6.2.2. Defense Readiness Reporting System–Army (DRRS-A) / DRRS-Strategic / GFIM OE

ATIS will upload Global Force Management Data Initiative (GFM-DI) compliant training readiness information

3.6.2.3. Range Facility Management Support System (RFMSS)

Live Fire training (Training Land and Ranges) will be provided to inform Total Ammunition Management Information System (TAMIS) and Standards in Training Commission (STRAC) in the areas of training ammunition and utilization.

3.6.2.4. STE

ATIS will "bootstrap" the STE avatars based on unit structure, personnel, Warfighter TSP, etc. STE events are schedulable events that should appear on the training calendar. It should be as easy to setup a STE training event as it is to book a physical venue.

3.6.2.5. Army Vantage

ATIS will populate data in Vantage along a number of lanes since ATIS is the authoritative source for unit readiness, institutional information, training development data, resource enabler information (ex. TS-MATS), etc.

3.6.3. Systems ATIS must continue to maintain interfaces:

3.6.3.1. Army Training Requirements and Resources System (ATRRS) (bi-directional)

ATIS will obtain student enrollments and course schedules from ATRRS. ATIS course completions are sent back to ATRRS. ATIS will enhance the interface to send student enrollment and schedule requests to ATRRS.

3.6.3.2. Career Acquisition Management Portal (CAMP) / Career Acquisition Personnel & Position Management Information System (CAPPMIS)

ATIS will need Defense Acquisition Workforce Improvement Act (DAWIA) acquisition certification records. ATIS will provide acquisition workforce completed Individual Development Plan (IDP) back to CAMP for Human Resource Management (HRM) talent management activities.

3.7. Future Interface Considerations

Some external systems have and will continue to introduce capability gaps that ATIS will have to solve. For example, Army Organization Server defines unit force structure only down to the company level, but ATMC will operate at the platoon and squad level. DTMS users must manually configure formations below company level, then assign leaders and Soldiers to facilitate training management within small units. A similar situation occurs with TDA force structure where TDA paragraphs are often lagging behind the actual organizational structures in use. ATIS will need similar features to maintain supervisor/employee relationships.

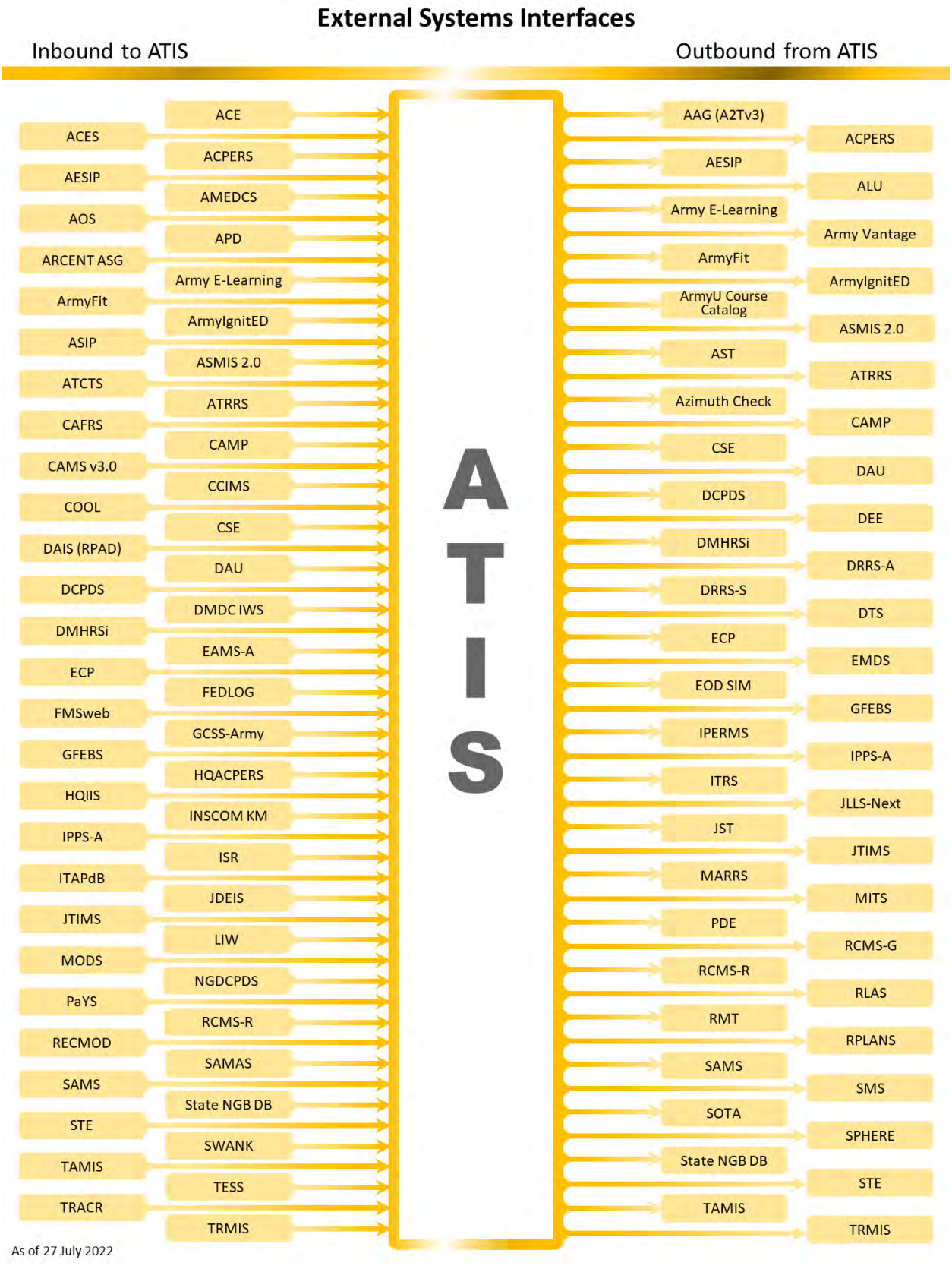

Figure 5: ATIS System Interfaces

3.8. Training Domain Operational Views and Narratives

The ATIS enables an enterprise level, Army wide COP of training and education information. This provides for informed interaction among three separate, but over-lapping training domains (operational, institutional and self-development). Each training domain complements the other. The ATIS COP allows synchronization of training, education, and experience in order to achieve the goal of trained Soldiers, Army Civilians, leaders, and ready units. All of the domains have an important role in providing a composite picture of a learners' educational portfolio. The graphics below illustrate how each of the training domains currently operate.

3.8.1. Operational Training Domain

The operational domain encompasses training activities that unit leaders schedule, and individuals, units and organizations undertake. Unit leaders are responsible for the proficiency of their subordinates (Soldiers and Army Civilians), subordinate leaders, teams/crews, and the unit as a whole. The recently published FM 7-0 focuses on training leaders and Soldiers as effectively and efficiently as possible given limitations in time and resources. Through automated processes and a shared COP for training, the ATIS decreases administrative burden and increases time to train. See Figure 6 below.

3.8.2. Institutional Training Domain

The institutional training domain includes Army centers/schools that provide initial training and subsequent functional and professional military education for Soldiers, military leaders, and Army Civilians. Army schools ensure Soldiers, leaders, and Army Civilians can perform critical tasks to prescribed standards throughout their careers, and support units on a continuous basis. See Figure 7 below.

3.8.3. Self-development Training Domain

The self-development training domain recognizes that Army service requires continuous, life-long learning and that structured training activities in Army schools and in operational units often will not meet every individual's need for content or time. Self-development enables individuals to pursue personal and professional development goals. Leaders help subordinates identify areas where self-development will improve performance of current assignment and areas that will prepare them for future career assignments. See Figure 8 below.

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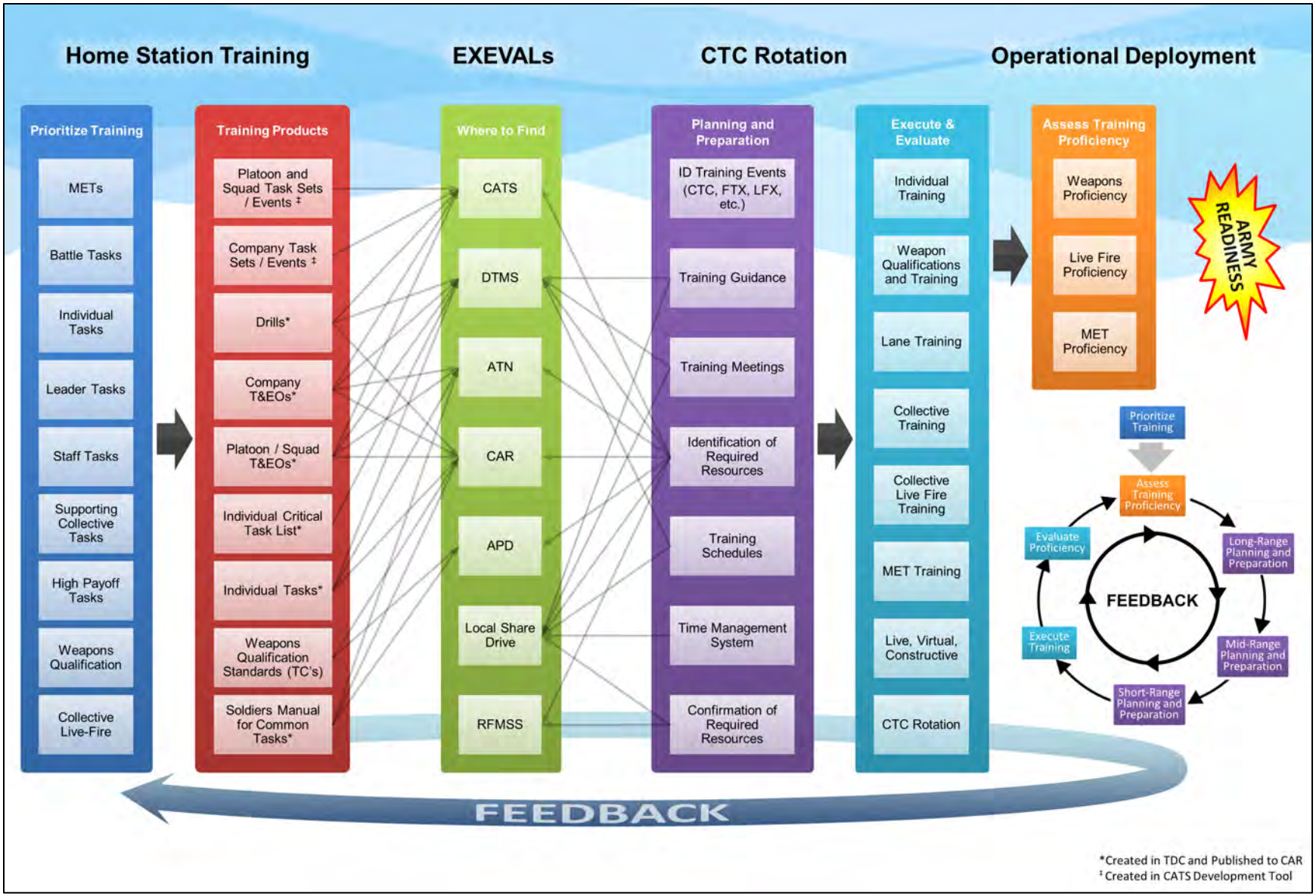

Figure 6: Current Operational View for Operational Training Domain

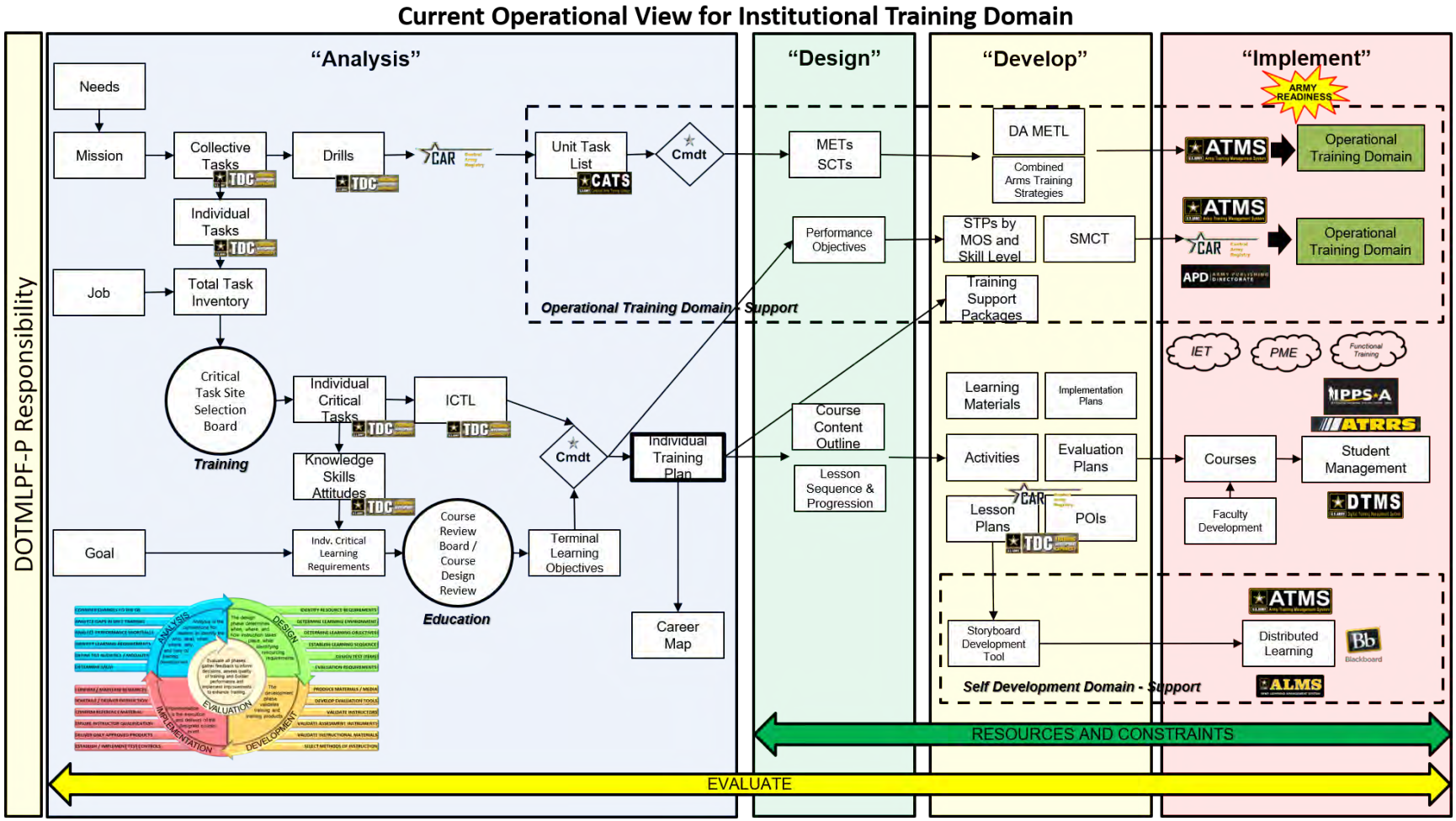

Figure 7: Institutional Training Domain

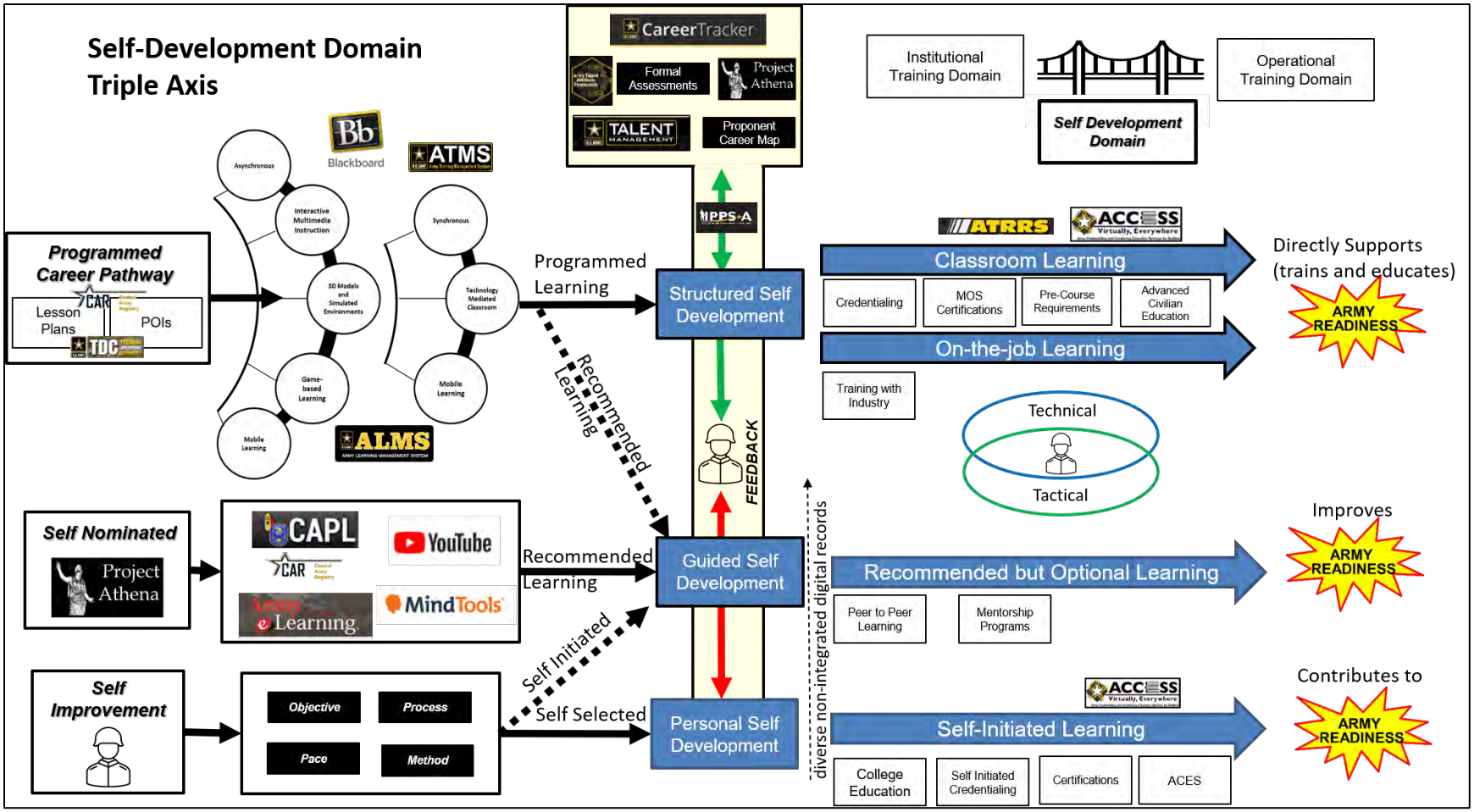

Figure 8: Self-Development Training Domain

3.9. Organizational Change Management/Strategic Communications (STRATCOM)

The objectives of the ATIS STRATCOM are to educate and inform stakeholders on the importance and value of ATIS through the development of timely and effective communication to increase understanding, build a positive perception and encourage adoption among user and stakeholder audiences. ATIS is developing a STRATCOM ICW the PdM ATIS that will guide leadership and staff strategic engagement, communication, and outreach. Additionally, a rollout concept, and/or "roadshow" for ATIS will be addressed within the STRATCOM plan. Components of the STRATCOM include:

3.9.1. Development and management of ATIS brand recognition through online stakeholder engagement

- Focus group sessions with functional community stakeholders
- Surveys and other mechanisms to collect user/stakeholder feedback
- Host web-based briefings: Senior leader "Town Hall" sessions (with functional and material development community), live-streamed events
- Maintain and update content for the ATIS public website
- Provide owners of Army web resources with content that promotes ATIS
- Provide owners of Army social media with content that promotes ATIS
- Pitch articles and advertisements to external media

3.9.2. Development and management of ATIS brand recognition through in-person stakeholder engagement

- Develop communications collateral to include Army STAND-TO, fact sheets, handouts, and other communication materials
- Attend relevant Army conferences to promote ATIS benefits to the force
- Support senior leadership and staff with in-person ATIS briefings

3.9.3. Engagement with internal Army through internal channels to educate them on ATIS's capabilities, positive aspects, timeline and benefits

- Support leadership and staff with in-person ATIS briefings at ACOMs, COEs, Army U and other relevant commands and stakeholder organizations
- Host web-based briefings: town halls, live-streamed events
- Maintain and update content for the ATIS public website and social media platforms

3.9.4. Leveraging owners of relevant external channels to engage with internal Army stakeholders

- Equip external leadership and staff with material to conduct in-person/virtual ATIS briefings
- Pitch articles and advertisements to external media outlets (e.g., national media, defense industry/trade associations)
- Monitor media coverage and report results to ATIS leadership
- Provide owners of Army web resources with content that promotes ATIS
- Provide owners of Army social media with content that promotes ATIS
- Develop and distribute materials at relevant Army conferences

3.9.5. Leveraging of ATIS Internal Staff by providing them the tools to educate stakeholders

- Organize and promote internal “all hands” meetings to provide staff with program updates and address questions
- Develop leadership messages to all staff on behalf of the ATIS senior leadership
- Support the development of staff onboarding materials

3.10. Basic Capability Requirements

Objective ATIS is the enduring enterprise capability that will replace the functions of approved legacy systems that support the Manage Army Learning Environment (ALE) E2E business process. Additionally, this will be the first time that the Army integrates the three training domains within one suite of automation tools. Objective ATIS will be completely integrated and interoperable; eliminating redundancy, friction points and reducing capability gaps in current manual, “swivel-chair” processes by bringing Industry best practices to the Army. This objective ATIS solution moves the Army from Industrial Age to Information Age and beyond to the Cognitive Era by introducing Artificial Intelligence/Machine Learning (AI/ML) and predictive analytics decision-support capabilities. This positions the Army for information and data domination while enabling Multi Domain Operations. Furthermore, the objective ATIS capability requirements include a common set of data, a shared portal interface for users, ALE workflow management and automation, and a scalable and flexible environment to add or decommission applications. This capability must include the ability to adapt Army Training in a dynamic and transparent way to meet the training and education needs of the Warfighter. Finally, ATIS capability needs include the ability to provide data requirements which facilitate institutional business processes for enterprise planning. Table 7 provides descriptions for the six objective ATIS capability areas.

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Table 7: ATIS Capabilities Overview

ID	Capability Area	Objective ATIS Capability Description
ATMC	Training Management	The integrated functionality of ATMC enables leaders at all echelons to facilitate the Training Management Cycle as prescribed in FM 7-0: plan and prepare, execute, evaluate and assess training and education. ATMC enhances the ability of leaders to conduct operational and institutional training management and incorporate self-development for individuals and leaders. Examples include grade book / training records (individual and unit), training strategies, student management services, registrar functions, live-fire operations, after action reviews / feedback, and virtual campus.
TESC	Training Enterprise Scheduling	The TESC is calendar centric and provides shareable, reusable training calendars with drag and drop capability. For operational units and leaders, ATIS will build training events and exercises. ATIS interfaces with ATRRS to select/schedule courses. The scheduling capability assists in identifying available resources (e.g., classrooms, training areas/ranges, TADSS, facilities, and manpower). The TESC will integrate automated reservation staffing/approvals and resource schedule deconfliction recommendations.
TRMC	Training Resource Management	The TRMC provides centralized visibility of available inventory of training support products, facilities, and services (e.g., training areas/ranges, facilities / classrooms, TADSS, ammunition, and instructors / operators). The TRMC—in conjunction with TESC—will maximize automation requests and staffing/approval routing. The system communicates with the appropriate resource manager through orchestrated workflow—to include resources outside of ATIS (e.g., training ammunition requests with TAMIS). TRMC captures and maintains resource utilization during training events from operational, institutional and self-development domains. TRMC also includes the modeling of required and available facilities to support live training as well as the planning process for future facilities. TRMC also includes the automated generation of surface/weapon danger zones. TRMC also includes training resource management Command & Control.
ATDC	Training Development	The ATDC enables training developers to create, manage, and distribute learning (training and education) products (e.g., individual and collective tasks / CATS, drills, lesson plans). This includes support for Warfighter Training Support packages. The ATDC provides Army schools, institutions, and TRADOC's TOMA with new analytical tools for decision making and managing people, products, as well as resources. ATDC automates in conjunction with EASS—import of information and table data from reference catalogs, FedLog, ammunition, MOS/AOC/ASI, MTO&Es, TADSS, etc. Additionally, ATDC integrates support tools for analysis of job, task, or mission.
ALCMC	Learning Content Management	The Learning Content Management Capability facilitates the cataloging, management and delivery of learning content (remote, distributed and resident) across three training domains: institutional, operational and self-development. Provides tools for group collaboration, gradebook, and knowledge management, management of student populations and lifelong learning for alumni. Individual T&E records will follow learners for the entirety of a federal service career and beyond.
EASS	Enterprise Architecture Standards and Services	Enterprise services are foundational to all ATIS capabilities to include: enterprise web portal, help services, and support for mobile functions. EASS enables data sharing across the Army, Sister Services, joint commands, and governmental/education communities. It provides the central repository for T&E products and support materials. EASS contains the predictive analysis decision-support tools to enable planning and decision making. Provides individual users a customizable landing page to configure and monitor what T&E information is important to them and receive key notifications and alerts. This allows unit leadership to communicate key T&E information and alerts directly to subordinate members outside of email.

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3.11. Objective ATIS Business Outcomes (BO)

Table 8 describes each of the expected BOs of the Objective ATIS capability need. Each BO nests within the appropriate High-level Outcomes from Table 7 above.

Table 8: Objective ATIS Business Outcomes (BOs)

HLO-ID	BO-ID	BO Short Title	BO Description
HLO-1	BO-1	Establish a DoD Data-Sharing Compliant Army Training Information System	An information system architecture that manages and shares training information and services across the Army enterprise in compliance with DoDI 8220.ff. Authoritative data will be identified as they are developed. ATIS will be compliant with DODI 8260.03 GFM DI data standard.
HLO-2	BO-2	Establish a Training Enterprise Scheduling Capability	Provide a single Army Training Scheduling Capability
HLO-2	BO-3	Establish an Army Training Development Capability	Provide a single Army Training Development Capability
HLO-2	BO-4	Establish an Army Training Learning Management Capability	Provide a single Army Training Learning Management Capability
HLO-2	BO-5	Establish an Army Training Management Capability	Provide a single Army Training Management Capability
HLO-2	BO-6	Establish a Training Resource Management Capability	Provide a single Army Training Resource Management Capability
HLO-3	BO-7	Reduced spending on legacy systems	Legacy systems sunset will no longer require funding
HLO-3	BO-8	Alignment of T&E information with Army and DoD modernization initiatives	Single Army Authoritative Training and Education management tool at all echelons from individual through collective training and self-development.
HLO-4	BO-9	Relieve undue administrative burden that reduces available time to lead and train	Eliminate redundancy, facilitate communication and coordination, and improve planning and resource alignment. Enhances the ability of leaders to conduct operational and institutional training management, and incorporate self-development for individuals and leaders.
HLO-5	BO-10	Establish enterprise architectures standards and services	Provide a common data environment that serves as the single consolidation point for all authoritative data. Provide advanced and predictive analytical capabilities that will enable the retrieval and integration of disparate data across the training and education enterprise to create an automated common operational picture (COP) for leadership.

3.12. Linkages to Army Data Plan

The Army Data Plan (ADP) covers fiscal years 2020 to 2023, and its desired outcomes will be realized by effective data and cloud management across all mission areas and at every echelon. The data plan fulfills Army obligations to conform its data posture to National and Departmental priorities, which continue to evolve, placing ever-increasing importance on the capacity to recognize and adapt to the dynamic posture of data in the pursuit of all Army missions. The plan will deliver the right data, to the right consumers, at the right time in a joint, multi-domain, highly contested operating environment. The Army will be a modern, data-aware organization capable of delivering highly useable data. The ATIS will make T&E data compliant and consumable in the modern Army enterprise. See Table 9.

825 **Table 9: ATIS Linkages to Army Data Plan**

ADP Principle	Summary
Data is an enterprise asset	Army data must be managed and leveraged in combination with other non-Army data (including publicly available information) wherever necessary to make optimal decisions.
Data must be obtainable	Data architectures support and enable enterprise-wide data availability by ensuring visible, accessible, and understandable data.
Data must be shared	Data is managed to enable sharing across functional areas, domains, and mission areas to derive meaningful insights to optimize warfighting and business operations performance.
Data must be reliable	The consumer trusts the origins of the data, is fully aware of the confidence level, and that the integrity of the data has not been compromised and has been adequately protected from source to destination.
Data must be protected	Data protection requires appropriate security and handling controls. The Army must ensure data confidentiality, integrity, and availability are always maintained throughout the data lifecycle.

826 **Source: Army Data Plan 2019**
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828 ## 3.13. Linkages to the Army Business Management Plan 2021-2025

829 The ATIS aligns to the Army Business Management Plan (ABMP) Strategic Goal 2: Data Enabled
830 Enterprise. The ABMP sets forth systematic and continuous improvement of business processes in order
831 to maintain readiness and realize the 2035 Army of the Future. ATIS as a DBS, contributes to these
832 reforms that leverage opportunities to free up time, money, and personnel to reinvest in higher Army
833 priorities, and enable commanders to make faster, better resource-informed decisions. See Table 10.

834 **Table 10: Objective ATIS Linkages to Army Business Management Plan**

ABMP	ABMP Objective	ABMP Goal	ABMP Goal Description Summary
ABMP 2.A(1)	Vantage and Big Data Platform	Data Analytics	Enable the Army to see itself by providing senior leaders, Soldiers, and staff with a common, integrated data platform for visualizing and analyzing the current and predicted future state(s) of the Army.
ABMP 2.A(4)	Evolving Installations into Connected Platforms	Data Analytics	Aggregate data across major installation operations to create a visualization of operations at the individual installation and the connected enterprise level to drive decisions based on data, lay a foundation for predictive analytics, and create an environment conducive for AI/ML
ABMP 2.B(1)	Cloud Migration	Data Infrastructure	Move enterprise resource planning (ERP) applications and data into a common, consolidated cloud environment to improve cybersecurity and shift network, storage, and computing infrastructure to the service provided allowing the Army to maximize the value of data. The D2RR data lake will be the cloud repository of all G-3 data.
ABMP 2.B(3)	Portfolio Management/Business System Rationalization	Data Infrastructure	Active portfolio management with particular emphasis on eliminating system redundancies, reducing investment in legacy systems, reducing costs, and achieving accountability of systems while ensuring effective integration across the Business Mission Area (BMA).
ABMP 2.B(8)	Data Management and Data Science Education and Training	Data Infrastructure	Develop and execute training and education opportunities to improve Army data management, data analytics, and data science capabilities.
ABMP 2.C(1)	Data Plan	Governance	Execute the Army Data Plan to transform how the Army manages data to enable data-driven decisions and to manage and protect data as Army strategic assets enabled through a hybrid, multiple cloud ecosystem.

3.14. Linkages to Army Training Concept 2035 Required Capabilities

Table 11 describes each of the expected draft Army Training Concept 2035 Required Capabilities that the ATIS capability nests with and supports.

Table 11: Objective ATIS Linkages to Army Training Concept 2035

ATC-ID	ATC Objective	ATC Goal	ATC Goal Description
ATC RC-1	Develop flexibility, creativity and thinking in Army leaders	Train and Educate Strategic Thinkers and Leaders	The Army develops "outside the box and risk accepting" leaders that formulate and implement military goals, determine actions to achieve the goals, and mobilize resources to execute the actions with mission partners at the operational and strategic levels of warfare in any strategic OE.
ATC RC-2	Optimize Human Performance	Train Soldiers and Leaders	The Army understands and executes the physical and cognitive tasks to optimize the human performance required to employ warfighting capabilities across multiple domains and enhance operations in a decentralized C2 environment
ATC RC-3	Tailor Soldiers, leaders, and units for multi-domain combat	Developing Leaders and Soldiers	The Army develops a capability to better assess, analyze, and implement training via a common operating picture (COP) of the training environment across all training domains (includes persistent, consistent access to training information/products, associated resources, and Soldier/Unit data) that improves daily management and execution of Operational training
ATC RC-4	Revolutionize training management	Simplify Training Management	The Army develops a capability which simplifies training management and reduces the commander's training burden by enabling persistent and consistent access to time sensitive training information/products, associated resources, and Soldier/Unit data at the point of need

Source: The Army Training Concept 2035 (Proposed/Draft)

3.15. Linkage to Army Learning Concept 2035

Table 12 describes each of the expected Army Learning Concept 2035 required capabilities that the ATIS capability needs nests with and supports.

Table 12: Linkage to Army Learning Concept 2035

ALC-ID	ALC Objective	ALC Goal	ALC Goal Description
ALC RC-1	The Army as a Learning Organization	Pervasive Feedback/Change Mechanisms	The Army develops a capability to house and access pervasive feedback repositories in order to facilitate quick response changes to MDO learning content.
ALC RC-2	Learning Strategy Design and Tactics	Customized Learner Pathways	The Army requires the capability to engage as active participants in an individual's career-long learning process, in order to improve existing attributes and skills into mature MDO competencies.

ALC-ID	ALC Objective	ALC Goal	ALC Goal Description
ALC RC-3	Data Informed Learning Infrastructure	Shareable/Interoperable Secure Data	The Army requires the capability to capture and track learner data from interoperable training systems and warfighting systems in order to optimize learning continuums for individuals and teams.
ALC RC-4	Fostering Human Capital and Workforce Development	Multi-disciplinary TED Workforce	The Army requires the capability to manage talent by assessing the development and assignment of trainers, educators, and developers across the three training domains of Army learning in order to optimize learners' preparation for MDO.
ALC RC-5	Fostering Human Capital and Workforce Development	Talent Managed TED Workforce	The Army requires the capability to conduct career-long learning competency inventories; predictive and developmental skill assessments; and development and certification processes to remain adaptive and support MDO readiness demands.

Source: The Army Learning Concept 2035

3.16. Linkages to Training and Readiness (T&R) Domain Objectives

Table 13 describes each of the expected T&R Domain Objectives that the ATIS capability need nests with and supports.

Table 13: Linkage to Training and Readiness Domain Objectives

T&R-ID	T&R Domain Data Goal	T&R Domain Objective Description
T&R OBJ-1	Training: Understand costs of training and prediction of training readiness	Develop Leaders and enable training (T&R 1)
T&R OBJ-2	Training: Understand costs of training and prediction of training readiness	Provide Training Capability and Support (T&R 2)
T&R OBJ-3	Readiness: Improve situational awareness and readiness forecasting to assist with resource allocation and force planning decisions	Support Projecting Ready Forces in support of Operational Requirements (T&R 3)
T&R OBJ-4	Readiness: Improve situational awareness and readiness forecasting to assist with resource allocation and force planning decisions	Provide Institutional Support in support of Operational Requirements (T&R 4)
T&R OBJ-5	Readiness: Improve situational awareness and readiness forecasting to assist with resource allocation and force planning decisions	Improve Business Processes (T&R 5)

Source: Army Organizational Execution Plan, Portfolio Review FY21

3.17. Constraints, Dependencies, and Success Factors

The following conditions must be in place for ATIS capability (Items 1-8):

1. Simplified and intuitive graphical user interface featuring human-centered design principles.
2. Scalable and flexible infrastructure built for over 2 million concurrent users across CONUS and OCONUS regions.
3. Data warehouse architecture is capable of managing and distributing authoritative data
4. Data storage that is sufficient to meet historical and future ATIS needs
5. Sunsetting legacy systems in accordance with the designated decommission target dates or sunset priority.

6. Adequate resourcing to develop and sustain the ATIS materiel solutions is secured and sustained.
7. Senior-leader champion(s) and involvement throughout the process.
8. Close partnership and coordination between functional management and materiel development communities.

Constraints and dependencies for delivery of the ATIS currently include (Items 9-15):

9. Must integrate Artificial Intelligence/Machine Learning (AI/ML) capabilities for unstructured/structured data.
10. Must leverage DISA-approved cloud hosting solutions for Impact Levels 4/5 (unclassified). (Will need IL6, if SIPR (classified) gaps are implemented.)
11. Must integrate with cArmy environment and should leverage self-service tools to maximize efficiencies.
12. Must be Common Access Card (CAC)-enabled or 2-factor authentication and remain in compliance with DoD Risk Management Framework.
13. Must be designed open architecture approach to seamlessly integrate systems.
14. Must comply with A-BEA requirements for enterprise architecture products.
15. Legacy system must not be decommissioned until functionality is proven operable in ATIS.

3.18. DOTMLPF-P Constraints for legacy training information systems (current)

Table 14: DOTMLPF-P Constraints, "As-Is" State

Category	Relevance
Doctrine:	Updates in the Army Regulation (AR) 350 series regulations may be required to eliminate existing mandatory system references if affected by the ATIS development, (e.g., Army Training Network (ATN), Army Career Tracker (ACT), Digital Training Management System (DTMS), etc.); however, changes in doctrine will not eliminate the current problems / issues. A doctrinal change has no effect on schema and architecture of deployed systems. FM 7-0 outline the principles of unit training and leader development, one of which is "train as you fight." This principle requires access to all training and education information and resources, which could be provided by a COP of the training environment. Current training and education information systems are not adequately integrated, synchronized, or trusted; therefore, they don't present a COP.
Organization:	Organizational changes will not resolve the current problem identified in the root cause analysis, i.e., Data Quality, Data Reliability, Net-Centricity, Data Availability, and Conflict resolution. Organizational structure has no effect on data exchanges, system interfaces or reduction of redundant systems. Just as the current TIS are stove-piped, disparate non-integrated systems, the organizations responsible for their development, acquisition and sustainment are stove-piped and disparate.
Training:	Changes in training model will not eliminate the current problem / issue. Incorrect use of current systems is not causing the problem. Training or lack of training on stove-piped TIS has no impact on locally created systems developed outside of ATIS RCB governance processes.
Materiel:	Within the Army training environment, information systems exist to collect authoritative data and provide required data to Commanders, leaders, Soldiers, and Civilians. Many of these systems lack communication features; rely on point-to-point interfaces; collect

Category	Relevance
	and store copies of authoritative data; and require multiple access points. These independent systems provide limited, sometimes redundant, and/or conflicting information. A material solution will address problems identified in the root cause analysis.
Leadership:	A change in leadership and education will not eliminate the current problem / issue. Strong, steady, and committed support among senior Army leadership is essential for ATIS success, primarily because the ATIS system must be fed by a sizeable volume of transactions from automated systems which support various functional areas across the Army. Education about ATIS must exist throughout the lifecycle of the project with all Army stakeholders and users. The goal of this education is the creating of awareness, understanding, buy-in, and finally commitment of affected populations to implement and support the changes ATIS develops.
Personnel:	A change in training information system personnel will not address the problems identified in the root cause analysis. Having multiple systems doing the same thing at different locations may exacerbate the problem. Changing personnel strength will not address the issues. For all ATIS releases, project team and government personnel from impacted organizations will analyze ATIS business process designs and define the user roles and corresponding system access profiles required to perform any new business processes while retaining appropriate separation of duties. User roles and system access profiles provide the basis for user training.
Facilities:	A change in facilities will not eliminate the current problem / issue. Even though some cost avoidance may be identified / realized by the collapse of redundant systems, a facility change alone will not address all the problems identified in the root cause analysis. ATIS will utilize secure communications infrastructure. A primary and a backup data center, both accessible via the Non-Secure Internet Protocol Network, are required to support ATIS. A reduction of facilities may occur due to server consolidation, reduction of redundant systems, consolidation of development resources, and the analysis of alternatives process effect on the database deployment approach.
Policy:	Updates in training policies may be required to eliminate existing mandatory system references if they are affected by the ATIS development and deployment to match Army training doctrine. The Army cannot afford to have organizations build "home-grown" training systems that fail to meet Army development and deployment standards especially when the solution may be required at the Army Enterprise level. Army training organizations must be part of a greater solution expending Army resources in the manner that meets all user requirements.

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4. Identify Capability Performance Measures (DBS equivalent of JCIDS KPPs)

4.1. The Capability Performance Measures (CPM)

The CPMs identify desired performance measures for an enduring Objective ATIS solution (see Tables 15 and 16). Note that CPMs for DBS systems are equivalent to Key Performance Parameters (KPPs) in materiel development programs. These measures will help determine the effectiveness of any potential implementation of Objective ATIS capabilities. They will inform how well the Objective ATIS capabilities resolve the problems in the current environment once the capability is implemented. They will help distinguish what Objective ATIS should support to deliver business value and what the Objective ATIS capability must support in order to be minimally acceptable. Additionally, they serve as indicators for ATIS Data Initiative implementation.

Table 15: Objective ATIS HLO Performance Measures / Acceptance Criteria

HLO Title	Acceptance Criteria				Benefits	Risk	Assumptions (A), Constraints (C), Dependencies (D)
	Measurement	Current (Baseline) Values	Targeted Threshold Values	Targeted Objective Values			
HLO-1 Build iterative and Secure Information Capabilities	% of Systems Compliant w/DoD Data Sharing Policy	0	100	100	• Improves access to information • Eliminates information silos • Enables standardization • Responsive to change using integrated resources	Consensus of system owners	(A) Army G-3 provides effective governance of current system owners
HLO-1 Summary: Ensure training information (data) is in a shareable, reusable format that can be trusted as an authoritative source to enable decision making. ATIS information is accessible over a single, Army wide enterprise that provides common access to information sources. Necessary changes to ATIS can be implemented rapidly with reduced management and governance burden.							

HLO Title	Acceptance Criteria				Benefits	Risk	Assumptions (A), Constraints (C), Dependencies (D)
	Measurement	Current (Baseline) Values	Targeted Threshold Values	Targeted Objective Values			
HLO-2 Re-engineer/Use End-to-End Business Processes	# of Training System(s) Access Points	37	1	1	• Single access point • Eliminates duplication • Reduces complexity/time • Provides enterprise-level services	Consensus of system owners	(D) All Army TIS will be COE and JIE compliant
HLO-2 Summary: Provide system interoperability and workflow automation and orchestration to create efficiencies for users of the training and education information environment. ATIS enables users to plan and prepare, execute, evaluate and assess training through simplified, configurable interfaces. Enhanced resource management results in greater asset visibility and more accurate reporting and budgeting.							
HLO-3 Subsume legacy systems functionality	Number of systems with functionality subsumed	0	16	28	• Reduced costs • Centralized funding and management	Loss of niche capabilities when legacy systems are retired	(A) ATIS can provide capabilities delivered by legacy systems (A) Only legacy systems that do not support programming and budgeting, and are not ATIS DI compliant are targeted for retirement
HLO-3 Summary: Consolidating capabilities (functionality) from a multitude of current training information systems eliminates redundant functions, decreases logistics and manpower overhead, and yields cost avoidance efficiencies. All enduring capability will reside within the Business Mission Area (BMA) Training and Readiness (T&R) Domain; either integrated at data level or fully subsumed under the ATIS umbrella. Systems previously in the Warfighter Mission Area will be moved under the BMA. This reduces or eliminates funding competition and simplifies governance.							
HLO-4 Efficient, Effective, easy to use tools	System Usability Scale (SUS)	0	≥70	100	• Soldiers want to use it • Help is intuitive and built into the system	Adequate resourcing to develop/sustain the ATIS materiel solution	(D) Simplified and intuitive graphical user interface featuring human-centered design principles
HLO-4 Summary: Single sign on, intuitive help, streamlined access to data, something Soldiers will actually want to use, and empower subordinates with greater access to information							
HLO-5 Data-Centric Army	Percentage of data that complies with VAULTIS	<75%	75%	100%	• Keep pace with modernization initiatives • Standard general purpose APIs ease future interface work	Integration of AI/ML capabilities for unstructured/structured data	(A) Open architecture design to seamlessly integrate systems (D) Data warehouse architecture is capable of managing and distributing authoritative data

HLO Title	Acceptance Criteria				Benefits	Risk	Assumptions (A), Constraints (C), Dependencies (D)
	Measurement	Current (Baseline) Values	Targeted Threshold Values	Targeted Objective Values			
HLO-5 Summary: Data as ammunition—must comply with DoD VAULTIS factors—and be accurate, secure, auditable, and available in near real-time. Improved discoverability including historical data, accessibility, and interpretability to empower leaders with decision making tools via data analytics, machine learning, etc.							

Table 16: Objective ATIS Business Objective (BO) Performance Measures / Acceptance Criteria

BO Title	Acceptance Criteria				Benefits	Risk	Assumptions (A), Constraints (C), Dependencies (D)
	Measurement	Current (Baseline) Values	Targeted Threshold Values	Targeted Objective Values			
BO-1 Establish a DoD Data Strategy Compliant Army Training Information System	• % of existing systems that are compliant w/DoD Data Sharing Policy	0	100	100	• Reduces functional duplication • Potential Reduction of Cost	• Obtaining consensus of existing system owners	(D) Systems Analysis Required (A) Army provides effective governance over existing system owners (C) DODI 8260.03 GFM DI data standard
BO-2 Establish a Training Enterprise Scheduling Capability	• # of existing systems that provide these capabilities	5	2	1	• Reduces functional duplication • Potential Reduction of Cost	• Obtaining consensus of existing system owners	(D) Systems Analysis Required (A) Army provides effective governance over existing system owners
BO-3 Establish an Army Training Development Capability	• # of existing systems that provide these capabilities	2	2	1	• Reduces functional duplication • Potential Reduction of Cost	• Obtaining consensus of existing system owners	(D) Systems Analysis Required (A) Army provides effective governance over existing system owners
BO-4 Establish an Army Training Learning Management Capability	• # of existing systems that provide these capabilities	5	2	1	• Reduces functional duplication • Potential Reduction of Cost	• Obtaining consensus of existing system owners	(D) Systems Analysis Required (A) Army provides effective governance over existing system owners

BO Title	Acceptance Criteria				Benefits	Risk	Assumptions (A), Constraints (C), Dependencies (D)
	Measurement	Current (Baseline) Values	Targeted Threshold Values	Targeted Objective Values			
BO-5 Establish an Army Training Management Capability	• # of existing systems that provide these capabilities	10	2	1	• Reduces functional duplication • Potential Reduction of Cost	• Obtaining consensus of existing system owners	(D) Systems Analysis Required (A) Army provides effective governance over existing system owners
BO-6 Establish a Training Resource Management Capability	• # of existing systems that provide these capabilities	13	2	1	• Reduces functional duplication • Potential Reduction of Cost	• Obtaining consensus of existing system owners	(D) Systems Analysis Required (A) Army provides effective governance over existing system owners
BO-7 Reduced spending on legacy systems	• Number of systems decommissioned	0	24	28	• ALE workflow efficiencies • Integrated and interoperable enterprise	• Technology no longer enables data and information dominance in support of MDO	(C) Legacy system decommission dates established by Investment Decision Memorandum and Secretary of the Army guidance
BO-8 Alignment of T&E information with Army and DoD modernization initiatives	• Percentage of data that complies with VAULTIS	<75%	75%	100%	• Keep pace with modernization initiatives • Objective system that is responsive to future change/improvement • Enable training support tools for Multi-Domain Operations (MDO)-ready force by 2030	• Data storage that is sufficient to meet historical and future ATIS needs	(A) Integrate Artificial Intelligence / Machine Learning (AI/ML) capabilities for unstructured/structured data (D) Integrate with cArmy environment to leverage self-service tools
BO-9 Relieve undo administrative burden that reduces available time to lead and train	• # systems with redundant capabilities subsumed	<15 (note this is dependent of a given capability area)	<4	0	• Eliminate redundancy • Streamline planning with improved communication and coordination • Enhanced ability to conduct training management	• Obtaining consensus of existing system owners	(D) Scalable and flexible infrastructure built for over 2 million concurrent users across CONUS and OCONUS regions (A) Simplified and intuitive graphical user interface featuring human-centered design principles

BO Title	Acceptance Criteria				Benefits	Risk	Assumptions (A), Constraints (C), Dependencies (D)
	Measurement	Current (Baseline) Values	Targeted Threshold Values	Targeted Objective Values			
BO-10 Enterprise Architecture Standards and Services	• # of existing systems that provide these capabilities	8	2	1	• Reduces functional duplication • Potential Reduction of Cost • ATIS data is discoverable across governmental, DoD, and Army organizations	• Obtaining consensus of existing system owners	(C) Systems Analysis Required (A) Army provides effective governance over existing system owners

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5. Create Workplan for Business Solution Analysis

ATIS capabilities support the entire Analysis, Design, Development, Implementation, Evaluation (ADDIE) process, beginning with needs analysis, learning product and program development, resource determination, course and class management, and support to self-development activities through learning content and records management. The end-state is an integrated and holistic system that will leverage quantifiable and performance-oriented feedback to enable mastery of subjects, tasks, and skills that define the future success for our Army's Soldiers, leaders and units.

5.1. Capability Area Functional Points

Below is a list of the key functional points (FP) of ATIS' capabilities. They are presented in terms of the legacy systems, but may include future state objective ATIS functions. The introductory narrative provides an overview and introduces the list FP list. It is not intended to be an all-inclusive list of systems. Note that some FPs were provided by owners/managers of specific legacy systems. Where this is the case, the system is identified as "a" current provider of a given FP. However, the same or similar functionality may also be found in other systems. Not naming other systems is not intended to exclude them.

Additionally, linkage to the Business Use Cases (BUC) is provided for additional details. It is important to note that the requirements documented in BUCs are system agnostic. Many BUCs have a one-to-many relationship with current legacy systems. The BUC documents are posted and available for review in the MS Teams Channel for "ATIS CRD Working Group" in the Files / RTM / BUC folder. (See links below.)

The link to the channel is:
https://dod.teams.microsoft.us/l/channel/19%3adod%3aafaf6bbbcf834410ad5c43e16d1f677c%40thread.tacv2/General?groupId=111cc7a9-b3e4-4bc7-bccc-39c45c715afc&tenantId=fae6d70f-954b-4811-92b6-0530d6f84c43. Note that you may need to request access to the MS Teams area. The join code is: c8nk3v2. If these automated methods do not enable access—send an email to usarmy.jble.CAC.mbx.atis-por@army.mil and an TPO ATIS representative will assist further.

Once you have access to the teams channel the link below should take you directly to BUC folder:
https://dod.teams.microsoft.us/_#/files/General?threadId=19%3Adod%3Aafaf6bbbcf834410ad5c43e16d1f677c%40thread.tacv2&ctx=channel&context=BUCS&rootfolder=%252Fteams%252FATISCRDWorkingGroup%252FShared%2520Documents%252FGeneral%252FRTM%252FBUCS.

5.1.1. Army Training Management Capability (ATMC)

The ATMC provides improved support for individual and collective training managers from the force provider/ASCC level down to the squad/team. It automates all phases of the training management cycle (FM 7-0) and integrates with brigade and above readiness systems. It provides improved DTMS functions, such as capture training outcomes and visualize within a T&E information COP across leader dashboards. Provides integration with installation level Live-Fire event execution coordination and fire-desk operations (RFMSS). This provides unit and installation staff logs, Unexploded Ordnance (UXO) and safety event submission to installation staff to include resource utilization, safety reporting, UXO and exercise AAR/Feedback. ATMC integrates with TESC for enhanced calendars/schedules and improved planning tools. It automates capture/sharing of training event outcomes with individual, educational, collective and unit training centralized records. T&E information is then accessible for analysis and report generation. Registrar functions support institutional T&E via integration with LMS capabilities and linkage to external systems (IPPS-A, ATRRS, etc.). This includes integration with the Enterprise Army Learner Record which supports individual records and talent management. All readiness training records will comply with DODI 8260-03 (GFM DI Compliant) to include management of I/CS/P weapons assignment.

5.1.1.1. Record Training Outcomes / Maintain Training Records

These FPs are attributed to the ATMS and CAC-T TMD. Related BUCs include: ATMC-2000 2.1; ATMC-2008 2.1, 2.2, 2.3, 2.4.

A. Record Weapons Qualification (I/CS/P).
   1. Manage Weapons/Crew/Platform Assignment.
   2. Manage Special Weapons and Munitions.

3. Record Qualification Data Manually or Digitally (Manual Entry, Batch Upload, Scan QR Code, or Data Transfer).

B. Record Collective Live-Fire - TRMC-5009 2.7.
   1. View/Manage CLF Task and Echelon Target.
   2. Record Task Number, Execution Date, Evaluation, and Echelon.

C. Unit Training (Collective) - TRMC-5009 2.7.
   1. MET Assessment w/ Narrative and Last Evaluation.
   2. Task/Drill Evaluation (Collective, Battle, Staff/Crew).
   3. AAR Data (Shared Data w/ STE).

D. Soldier Training (Individual) - ATMC-2008 2.1, 2.2, 2.3, 2.4.
   1. ACFT / Physical Fitness.
   2. Individual Tasks (ICTL, AWT, E3B, Assigned/Mandatory)
   3. Driver/Operator, Airborne, JFO, Medic, MI, etc.
   4. Civilian/Non-standard Training Requirements/Certification.

E. Mandatory/ Command Directed Training (Identify, Assign, and Track Compliance) - ATMC-2008 2.1.
   1. Authority Level (HQDA, Proponent, Command).
   2. Customizable w/ Link to Standard and Non-Standard Products.

5.1.1.2. Training Common Operating Picture (Dashboards)

These FPs are attributed to the ATMS and CAC-T TMD. Related BUCs include: ATMC-2025 2.4.

A. Echelon Specific COP/Dashboard - ATMC-2025 2.1.
   1. Company and Above (METL, Weapons, ACFT, Reportable Training).
   2. Small Unit Leader Dashboard replaces Small Unit Leader Tool.
   3. Soldier Dashboard replaces Digital Job Book.

B. Data Visualization - ATMC-2023 2.1, 2.2, ATMC-2024 2.1.
   1. Pie Charts, Bar Charts, Gantt Charts, Heat Maps, Etc.
   2. Customizable by Command or Individual.

C. Business Intelligence/Data Analytics - TESC-1004 2.2, TRMC-5000 2.1.
   1. Forecast 30, 60, 90, and 120 Training Status Projections.
   2. Trend Analysis, Comparative Analysis, Custom Criteria.

D. Drill Down/Linked Accessibility - ATDC-4013 2.2, ATMC-2000 2.1.
   1. Nesting of echelons to view subordinate element performance.
   2. Linked dashboard items provide drill-down to specific data.
   3. Links to automation tools (planning tools, calendars tools, etc.).

5.1.1.3. Customizable and Recurring Training Data Reports

These FPs are attributed to the ATMS and CAC-T TMD. Related BUCs include: EASS-6006 2.1.

A. Customizable criteria, frequency, and alerts.

B. Echelon specific with protective measures to preclude spillage.

5.1.1.4. Training Planning Tools

These FPs are attributed to the ATMS and CAC-T TMD. Related BUCs as stated.

A. Task Prioritization and Crosswalk.
   1. Selected METs or other tasks from the UTL based on CTG and MA.
   2. Commanders/Leaders view prioritized tasks at echelon to Crosswalk.
   3. System suggests crew and individual training for small-unit leaders.
B. Plan/Prepare Training (Long, Mid, and Short Range) - ATMC-2010 2.1, TESC-1003 2.3, TESC-1004 2.1.
   1. Proponent recommended, task-based events with data from CATS.
   2. Multiple draft plans, supports standard or assigned mission METL.
C. Draft Sharing/Data Export for Commanders' Dialogue and Training Brief.
   1. Draft Plans and Calendars exportable to standard format.
   2. Viewable across echelons for dialogue and asynchronous planning.
D. Unit Calendars/Training Schedules - TESC-1001 2.2, 102 2.1.
   1. Overlays for time management cycles, resources, and multi-echelon.
   2. Drag and drop capability to conduct visual planning/de-confliction.
   3. Calendars/Schedules linked or exported to Outlook, STE, etc.
   4. Multiple views for planning horizon, training meeting, T-Week, etc.
E. Resource Requests/Allocation.
   1. Resource requirements from CATS data or historical training data.
   2. Facilitates requests/allocation with resource owner (by workflow).
   3. Recommend opportunity training by resource availability.
F. Institutional Training Support Plan (ITSP) (TRADOC TOMA).
   1. Provide validated list of unit functional course authorizations, requirements, and available inventory.
   2. Provide status of Soldiers' Professional Military Education (PME).
   3. Send required information to ATRRS to request a training reservation.

5.1.1.5. Reserve Component Capabilities

These FPs are attributed to the ATMS and CAC-T TMD. Related BUCs include: TESC-1004 2.2.

A. USAR Specific Capabilities/Integrated Resourcing - ATMC-2000 2.5, 2.6, TRMC-5009 2.24.
   1. AT logistical/administrative support to training management.
   2. Resource management capability to manage expense (cost of training).
B. ARNG Specific Capabilities/Integrated Resourcing - ATMC-2000 2.5, 2.6, TRMC-5009 2.24.
   1. AT logistical/administrative support to training management.
   2. Resource management capability to manage expense (cost of training).
   3. Manage State specific training requirements and resourcing.

5.1.1.6. Course Manager Capability (Institutional)

These FPs are attributed to the ArmyU and focus on institutional learning management.

A. Interface with ATRRS (via SIS) for institutional course management.
B. Troop School (non ATRRS) support with course enrollment/registration.
C. Provides class calendars, grade books, and course completion data.
D. Links to student ITR for comprehensive training/education record.
E. Manages instructor assignment/availability for school management.
F. Manages imports prerequisite training record.

5.1.1.7. Registrar Functions

These FPs are attributed to the ArmyU. Related BUCs include: ALCMC-3001 2.1, ATDC-4021 2.2, ATDC-4025 2.2, ATMC-2000 2.3, ATMC-2001 2.1, ATMC-2002 2.1, ATMC-2004 2.1, ATMC-2005 2.1, ATMC-2008 2.1, ATMC-2017 2.1, ATMC-2018 2.1, ATMC-2019 2.1, ATMC-2020 2.1 ATMC-2021 2.1, ATMC-2022 2.2, ATMC-2025 2.4, ATMC-2027 2.1, TESC-1002 2.2, TESC-1003 2.3, TESC-1003 2.1, 2.2, TRMC-5003 2.1, TRMC-5003, 2.1, 2.2, 2.3, 2.4, TRMC-5005 2.1, TRMC-5006 2.1, TRMC-5000 2.1, 2.2.

A. Army University Course Catalog repository (ArmyU CC).
    1. Repository that provides course description, academic hours, effective dates, modules and lessons, and TLOs and, Institutional/Programmatic Accreditation and credentials, and assessment information including passing score, ACE number and credit recommendation.
    2. Access to governmental agency T&E data sources will include Dept. of Education CIP codes and Dept. of Labor SOC.
    3. Provide (non-CAC card) access to Army University's commercial (.EDU) web areas.
    4. Integrate with ATIS T&E information and records.
B. Army University Management System (AUMS) - ATMC-2005 2.1.
    1. Fully integrate with ATRRS.
    2. Student Management System for Army Education courses that allow Course Manager to build course, Student to register, Registrar to set up school year, enroll/graduate, run reports and Faculty to generate roster, provide counseling, and issue grades.
C. Enterprise Army Learner Record (EALR) - ATMC-2005 2.1.
    1. Service Member profile with Institutional and Operational training and education records.
    2. Enables HRC/Leaders to make Talent Management Decisions for the Total Army Force.
    3. Interoperability with IPPS-A.
    4. Compliance with IEEE standards.

5.1.1.8. WebTed

These FPs are attributed to the WebTed and AMC G-1 TED Team. Related BUCs include: ALCMC-3001 2.1, ALCMC-3000 2.2, ATMC 2000 2.1, 2.2, 2.3,2.4, ATMC-2001 2.1, ATMC-2002 2.1, ATMC-2003 2.1, ATMC-2004 2.1, ATMC-2005 2.1, ATMC-2008 2.1, 2.2, 2.3,2.4, ATMC-2009 2.1, ATMC-2016 2.1, ATMC-2017 2.1, 2.2, ATMC-2018 2.1, ATMC-2019 2.2, ATMC-2019 2.2, 2.3, TESC-1002 2.1.

A. Manage training requests (SF182 process).
B. Class management, ability to build, manage local classes.
C. Push training to specific organizations based on training requirements to personnel that fall under them for specific training requirements.
D. Ability to lock classes to a specific location or organization (state, installation, specific org by business center, training center, and/or office symbol).
E. Reporting capability at all user levels to manage training, IDP, etc.
F. Ad Hoc report that provides ability to pull customized report data on any class.
G. Mandatory training reports.
H. Variety of Acquisition Workforce management reports.
I. Individual Development Plan (IDP) reports.
    1. Ability for employees to build IDP for supervisor review and digital approval.
    2. Ability for supervisor to build an employee's IDP (non-computer access; Wage Grade).

3. Ability for training coordinators to add and manage training on an employee's IDP, Reporting on IDP, IDP approvals by supervisor, and IDP approvals for organization.

5.1.2. Training Enterprise Scheduling Capability (TESC)

The TESC subsumes functionality for 13 different legacy systems that contain some level of scheduling capability fully integrating calendars/schedules and eliminating redundancy. Through integrated Operational and Institutional calendars, TESC enables leaders to conduct "what if" analysis to see how schedule changes impact training and education events. The ability to view and synchronize calendars/schedules across formations and with adjacent units allows commanders to facilitate cross functional and multi-echelon training opportunities. It provides visibility of available TSS products, facilities, services and enablers already reserved by other organizations. TESC integrates modernized SRP/RFMSS functionality, enhancing installation level Live-Fire scheduling, conflict management, co-use coordination and approval as well as submission of ammunition requests to TAMIS via resource management interfaces. TESC provides robust calendar functions such as selectable data overlays, scalability to planning horizons (long, mid, and short-range), reusable templates, and an ability to copy and paste calendar events to include from other units. Additionally, scheduling tools enable resource deconfliction and training and resource scheduling across the entire Enterprise.

5.1.2.1. Training Event Scheduling

These FPs are attributed to the ESC. Related BUCs include: TESC-1002 2.1.

A. Add, Shift, Swap, Search/Replace training events - TESC-1003 2.2.
B. Approve training events.
C. Conflict management of training events.
D. Create training events Course Master.
E. Build Course Finals (Classes) from Course Master - TESC-1003 2.2, 2.3.
F. Training Event Scheduling Reports - TESC-1002 2.3.

5.1.2.2. Event Requirements Management

These FPs are attributed to the ESC. Related BUCs include: TRMC-5000 2.1.

A. Edit POI resources - TESC-1003 2.2.
B. Group POI resources for training events - TESC-1003 2.2.
C. Training Support requests for training events - TRMC-5005 2.2.

5.1.2.3. Asset Allocation Management

These FPs are attributed to the ESC. Related BUCs include: TESC-1001 2.1.

A. Display Timetable of resources by allocations, requirements or issued - TESC-1002 2.1, 2.2.
B. Approve Resource/Support requests (equipment, weapons, ammo, TADSS, Military in the Field (MIF), ice & water) - TESC-1002 2.2.

5.1.2.4. User Tools

These FPs are attributed to the ESC. Related BUCs include: EASS-6004 2.4.

A. User management (create, find, account activation/deactivation, logging, role/level permission) - EASS-6004 2.4.
B. User Group management (create, assign classes/user permission) - EASS-6004 2.4.
C. Table Maintenance for Facilities listing management - TRMC-5009 2.1.

D. Table Maintenance for Equipment catalog management - TRMC-5012 2.2., 2.3.

5.1.2.5. ARTIMS Functions (NIPRNet only)

These FPs are attributed to the ARTIMS. Related BUCs include: TESC-1003 2.1, 2.2, ATMC-2008 2.3, ATMC-2009 2.1, 2.1.

A. Establish User Roles and Actions.
B. Automatic, periodic update of resident DRRS-A information.
C. Create ODT Opportunity.
D. Permit Viewing available ODT by ARNG States and USAR GFC.
E. Nominate Unit.
F. Approve Unit (unit requestor and unit providers)
G. Change Management.
H. Permission Controlled Active Dashboard(s) to efficiently take action to enable the workflow.
I. Reporting Services.
J. Status metrics on-screen, Customizable and Pre-Formatted Views.
K. Calendar Functions.
L. Comments/RFI.
M. Likely to be common to all ATIS - EASS-6000 2.1, EASS-6002 2.1, 2.3, EASS-6004 2.1, EASS-6010 2.1, 2.3.
N. 1st Army Documentation of Training for High Risk Events.

5.1.2.6. Training Management and Scheduling at TRADOC

These FPs are attributed to the TMSS. Related BUCs include: ATDC-4017 2.1, TESC 1002 2.5, TESC 1003 2.1, 2.2, TESC 1001 2.1, 2.2, TESC-1002 2.1, 2.3, 2.4 TESC-1003 2.3, TRMC-5009 2.1, 2.24, TRMC-5010 2.1, 2.2.

A. Schedule and manage classroom and resource scheduling across four COEs (FCOE, MSCOE, MEDCOE & CCOE) areas of operations.
B. Provide usage reports.
C. Develop approved unit training plans.
D. Provide planning capacity for future training decisions.
E. Manage facilities and resources throughout the SMDR/TRAP process and adjust during execution.

5.1.2.7. Personnel Profiles (WebTed)

These FPs are attributed to the WebTed and AMC G-1 TED Team. Related BUCs include: ATMC-2017 2.1, 2.2.

A. Identify Individual, non-repudiation.
B. Identify Organization/Chain of Command - ATMC-2005 2.1.
C. Identify location (region, state, locality) - ATMC-2005 2.1.
D. Identify Supervisor/Administration/Approval Chain - ATMC-2009 2.1.
E. Identify Employee by type (military, civilian, contractor, intern, matrix, local national).
F. Identify Employee by career plan or program (MOS, Job Series, Grade) - ATMC-2008 2.1.
G. Identify Employee by role (Employee, Supervisor, Administrator, Financial Approval) - ATMC-2009 2.1.

5.1.2.8. Courses/Classes (WebTed)

These FPs are attributed to the WebTed and AMC G-1 TED Team. Related BUCs include: TESC-1002 2.1, 2.4, 2.5, TESC-1003 2.1, 2.2, 2.3, TRMC-5000 2.1, 2.2, 2.3 TRMC-5008 2.3, TRMC-5009 2.1, TRMC-5012 2.4, TRMC-5014 2.2, 2.3, ESS-6004 2.4, EASS-6002 2.3, TESC-1003 2.1, 2.2, TRMC-5000 2.1, 2.2, TRMC-5009 2.24, ATDC-4017 2.1, TESC-1002 2.5, TESC 1003 2.1, 2.2, TESC 1001 2.1, 2.2, TESC 1002 2.1, 2.3, 2.4, TESC 1003 2.3, TRMC-5009 2.1, 2.24 TRMC-5010 2.1, 2.2.

A. Create subject course/class/event, Internal to site - TESC-1002 2.1.
B. Create subject course/class/event, External to site - TESC-1001 2.1.
C. Schedule subject course/class/event - TESC-1003 2.1.
D. Deploy subject course/class/event, Employee Request.
E. Deploy subject course/class, Supervisor/Admin request.
F. Deploy subject course/class, manually assign/push to Individual.
G. Deploy subject course/class, manually assign/push to Group.
H. Filter/limit enrollees by organization (MACOM, MSC, Org, office).
I. Filter/limit enrollees by location (region, state, locality).
J. Filter/limit enrollees by type (military/civilian/contractor/local national).
K. Filter/limit enrollees by role (employee/supervisor/admin).
L. Track Status of subject course/class/event (requested, approved, funded, in progress, complete) Employee - TESC-1002 2.5.
M. Track Status of subject course/class/event (requested, approved, funded, in progress, complete) Supervisor/Admin - TESC-1002 2.5.
N. Update Status of subject course/class/event (Employee, Supervisor, Admin, instructor, Event Owner).
O. Report Status of subject course/class/event (# requested, # in progress, # complete, % complete) - TRMC-5000 2.3.
P. Generate record of training, Internal - TRMC-5000 2.1.
Q. Generate record of training, External, attach records/certs - TRMC-5000 2.1.
R. Identify/create recurring events - TRMC-5000 2.1.
S. Generate notifications for events/recurring events - TRMC-5000 2.1.

5.1.2.9. Training Management Calendars and Scheduling Tools

These FPs are attributed to the ATMS-DTMS and CAC-T TMD. Related BUCs include: ATMC-2010 2.1, TESC-1003 2.3 TESC-1004 2.1.

A. Support briefings, training meetings, and are reconfigurable with scalable views to support long-range, mid-range, and short-range planning and preparation - TRMC 5000 2.1.
B. Feed training schedules that units lock and publish at specific time horizons based on COMPO - TRMC 5000 2.1.
C. Calendars and schedules will provide data to external systems, such as Outlook to ensure consistent communication and reduce redundant data entry - TRMC 5000 2.1.
D. Provide a digital link between training units, resource owners, and training support organizations to communicate and synchronize training plans, optimize resource allocation and utilization, and ensure priority training elements receive resources in a timely and unimpeded manner - TRMC 5000 2.2.
E. The calendars provide selectable information “overlays” that show time management cycles, range and resource availability, multi-echelon events, opportunity training with adjacent units,

and a multitude of other information elements to de-conflict and optimize training time and resources - TRMC 5000 2.2.

F. Calendars and scheduling tools that provide visibility of availability for land, range, and facility, PODS or allocations of TADSS and ammunition that influence unit training plans - TRMC 5000 2.3.

G. Provide predictive (what if) analysis to see how schedule changes impact training and education events and then coordinate and deconflict - ATMC-2024 2.2.

H. Provide near real-time view of resource availability status (request pending, reserved, or unavailable) to include waiting list - TESC-1001 2.2.

I. Calendar integration with the Army Synchronization Tool (AST) from force provider/ASCC down will allow the commander and leaders to visualize the training plan, communicate and synchronize the plan across all echelons, and execute coordination for training support and resources - TESC-1002 2.2.

J. Calendar search for/use established templates, copy and paste, or import calendar events to include from other units - TESC-1002 2.2, 2.3.

K. Provide view of installation managed facilities/areas with ability to schedule those available for training (use to eliminate manual coordination with many different local managers) - TESC-1002 2.3.

5.1.3. Training Resource Management Capability (TRMC)

The TRMC provides training resource manager tools for training support products, facilities, services, and other enablers within the TSSE (per AR 350-52), to include future STE devices. It integrates with ACOM/HQDA systems to import/export resource allocation/utilization data for the TSSE (e.g., MILCON, IMCOM). Functionality from systems such as TS-MATS, IDMS, TSIMS, RFMSS, ARRM, SRP GIS TK (RMTK, etc.) and like ACOM specific systems, will be subsumed or integrated with TRMC. An enterprise capability provides all organizations an integrated picture of real estate (ranges and training area) and movable things (TADSS and Training ammunition) as well as the future requirements for the training facilities, TADSS and ammunition based on force structure and training doctrine. The TRMC enables the ATIS calendars and scheduling tools to provide near real-time visibility of availability for land, range, and facility or allocations of TADSS and ammunition for resource manager action, including support for training ammunition requirements calculation and requests.

5.1.3.1. Provide resource reservation request and approvals, coordination, and scheduling deconfliction for scheduling tools (land, range, facility, TADSS, and ammunition, etc.)

This FP is attributed to the TPO ATIS-CIT. Related BUCs include: TESC-1002 2.2, TRMC-5000 2.1, 2.2, 2.3, 2.4 TRMC-5002 2.1, 2.2, ATDC-4010 2.2.

5.1.3.2. Training ammunition ordering between units and ammunition supply points

This FP is attributed to the TAMIS, STRAC, and TPO ATIS-CIT. Related BUCs include: TRMC-5014 2.2, 2.3.

5.1.3.3. Integration with SRP enterprise data warehouse (EDW)

This FP is attributed to the TPO Ranges and TPO ATIS-CIT. Related BUCs include: EASS 6004 2.3.

5.1.3.4. Provide holistic management of resources in support of the execution of the TESC planning of scheduled events supported by the real time command & control (C2) of each actual event/resource usage

This FP is attributed to the TPO Ranges. Related BUCs include: ATDC-4010 2.2 TRMC-5000 2.1.

A. This C2 begins at the time the resource is requested (via workflows initiated by the TESC capabilities/functionality), continuing through the confirmation/reservation of the requested resources, then followed by the real time tracking of the event/use of the resource as it occurs (if such real time/day of tracking of the resource is required).
B. Record actual event results/resource utilization data for historical reporting and analysis. RFMSS currently performs all levels of Resource Management C2, including being the ADS for live training resource utilization data) - ATDC-4010 2.2 TRMC-5000 2.1.

5.1.3.5. Model Live Training Requirements (Operational and Institutional)

This FP is attributed to the TPO Ranges and ARRM. Related BUCs include: TRMC-5005 2.1, TRMC-5009 2.1, 2.2, 2.3.

A. Track on-hand capacity to determine the types, amount, and location of training ranges/land needed to perform doctrinal training.
B. Collect data from ADS including training doctrine, force structure, unit stationing and weapons authorizations, real property inventory, live fire training strategy, facility status, and programs of instruction.
C. Make [ARRM] requirements data available to installations to prepare their Range Complex Master Plan (RCMP) (using the RCMP Tool (RCMPT).

5.1.3.6. Creating and annually reviewing/updating the RCMP ensures that all facility modernization and land management activities are complementary and focus on supporting the installation's training mission

These FPs are attributed to the TPO Ranges and RCMP. Related BUCs include: TRMC-5008 2.3, TRMC-5009 2.8.

A. Installation's project list for building new ranges or upgrading existing ranges to support the training that is required in the future - TRMC-5009 2.8.
B. Project information analysis of alternatives study, and associated maps of the specific range footprint (derived from the RMTK RDAP tool), surface danger zone (derived from the RMTK SDZ tool), airspace, military range and training related features and critical infrastructure features - TRMC-5009 2.5, 2.6.
C. The maps must follow the standards provided in the geospatial data Quality Assurance Plans. Projects for each installation are evaluated by the Command and by SRP to determine if they meet the standard criteria for Military Construction or OMA/OPA potential funding - TRMC-5009 2.1, 2.2, 2.3, 2.4.

5.1.3.7. MILCON Projects

This FP is attributed to the TPO Ranges and MILCON DB. Related BUCs include: TRMC-5009 2.19, 2.20.

A. Prioritize a set of lists, tracked by the MILCON Dashboard or the SRP TFML UFR Project list, depending on the type of project/funding.
B. When the project is completed, the new or updated range/training land is identified with a real property unique identifier (entered into real property), and becomes available for scheduling in RFMSS.

5.1.3.8. Range Configuration Control Board

These FPs are attributed to the TPO Ranges and RCCBWeb. Related BUCs include: EASS-6004 2.3.

A. Develop and establish common design standards for range facilities and the devices used on Live-Fire Ranges within the SRP.
B. Manage requests for change to design standards from participating agencies.
C. Enter and track notes on the MILCON Dashboard for any approved RCCB changes that impact ranges scheduled to be built (to ensure the range is built to the latest standards).

5.1.3.9. SRP Portal Central Hub

This FP is attributed to the TPO Ranges and SRPWeb Portal. Related BUCs include: EASS-6004 2.3.

A. Provide secure access to information, applications, and training for functional areas within SRP (currently leverages SharePoint technology).
B. Provide SRP content including range operations staff professional development, GIS guidance and policy, range modernization processes and procedures, range development activities, Integrated Training Area Management component information, as well as overall SRP programmatic information and guidance.
C. Provide separate public outreach content site accessible to the general public.
D. User access and management.
E. Admin Management of the portal.
F. Document Download History.
G. Consolidated Announcements/Calendar.
H. Approve multiple documents in bulk (workflow).
I. My Profile.
J. Participants Database.
K. Access Applications from portal menu.
L. Knowledge Centers.

5.1.3.10. SRP GIS Toolkit suite of desktop applications to include geospatial tools

These FPs are attributed to the SRP GIS TK and TPO Ranges. Related BUCs include: ATMC-2016 2.2, EASS-6014 2.2, TESC-1002 2.2, TRMC-5009 2.23, 2.3, 2.4, 2.6, 2.7, 2.8, 2.9.

A. Military Installation Map Toolkit (MIMT).
    1. Create standardized Military Installation Maps (MIMs).
    2. Production to the National Geospatial-Intelligence Agency (NGA) and Defense Logistics Agency (DLA).
    3. Standardize font, layout and format of MIMs.
    4. Production both in digital format to the SRPWeb Portal and hard-copy from DLA.
B. Army Metadata Editor Tool (AMET).
    1. Create and edit.
    2. Validate standardized metadata for Army installation geospatial data.
C. Range Managers Toolkit (RMTK) (suite of tools).
    1. Surface Danger Zone (SDZ) Tool creating SDZs for live fire training.
    2. Weapon Danger Zone (WDZ) Tool creating WDZs for air to ground weapons utilized during live fire training.

3. Foreign Surface Danger Zone (FSDZ) Tool creating SDZs for foreign weapons in accordance with that nation's range safety policy requirements.
4. Probabilistic Surface Danger Zone (PSDZ) Tool creating NATO Range Safety Working Group and International Range Safety Advisory Group compliant SDZs incorporating probabilistic methodologies.
5. Noise Tool creating noise contours within other installation map layers to assist with mitigation of potential noise complaints.
6. Range Development and Planning (RDAP) Tool create and modify TC 25-8 standard ranges and associated Range Operations Control Area facilities for planning range modernization or Range Complex Master Plan.
7. Explosive Training Range (ETR) Tool evaluating explosive hazards for breaching exercises and explosives training on military ranges.
8. On Range Ammunition Handling (ORAH) Tool evaluating the explosive potential of ammunition temporarily stored on ranges during live fire exercises.
9. Laser Range Management Tool (LRMT) plan and certify Army ranges for laser operations used by LRSOs.

5.1.3.11. Manage Training Aids, Devices, Simulators, and Simulations

These FPs are attributed to the TS-MATS and ATSC-TSAID. Related BUCs include: TRMC-5000 2.1, 2.2, TRMC-5001 2.2, 2.3, 2.4, TRMC-5002 2.1, 2.2, TRMC 5004 2.1, 2.2, 2.3, 2.4, TRMC-5007 2.1, TRMC-5008 2.2, TRMC-5012 2.2, 2.3, EASS-6004 2.4.

A. Army-wide, TRADOC, and Local Device catalogs.
B. Component Parts.
C. Inventory Management.
D. Hand Receipt Account (HRA) Management.
E. End Item Configurations.
F. Issue Transaction Templates.
G. Support Tables (maintain TS-MATS-specific codes, types, and official course data from other systems, GTAs, etc.).
H. Installation, Site, and Army-wide/Managerial User Management.
I. Training Qualification (Users, Operators, Trainers).
J. Transactions (Receipt, Issue, Turn-in, Transfer, Loan, Delete, Draft) - EASS-6004 2.4.
K. TRADOC Device Fabrication Management (Catalog/Request/Order/Invoice/Production/Purchase-Shipping Orders).
L. Device Utilization (TADSS and Simulators) (Usage/maintenance/unavailability/downtime) - TRMC-5001 2.1, 2.2, 2.3, 2.4 TRMC-5002 2.1.
M. Report Functions (TADSS Management, Utilization, and Fabrication Reports, including ad hoc parameters) - TRMC-5001 2.1, 2.2, 2.3, 2.4 TRMC-5002 2.1.
N. Barcode Scanner Interoperability.
O. Import/export data to/from other systems.
    1. GTA information provided by IDMS.
    2. Device information provided to TSIMS.

5.1.3.12. Manage and Distribute Printed and GTA Training Materials

These FPs are attributed to the IDMS, ATSC-TSAID and TPO ATIS. Related BUCs include: ATDC-4015 2.1, TRMC-5000 2.1, 2.2, EASS-6004 2.4.

A. IDMS Online Ordering System - TRMC-5000 2.1, 2.2.

1. Place order for materials and submit order.
2. View shopping cart.
3. View order status.
4. Order Event History.
5. Cancel Order.

B. Manage shipping address information (IDMS Online and IDMS Desktop share a common database so changes are applied to both systems) - TRMC-5000 2.1, 2.2.

C. Manage account users (IDMS Online and IDMS Desktop share a common database so changes are applied to both systems) - TRMC-5000 2.1, 2.2.

1. Process new orders.
2. Submit order to Warehouse.
3. View Orders.
4. Process invoice.
5. Print Request (DD Form 843 and GPO Form 2511).
6. Report generation.

D. Manage account/customers (IDMS Online and IDMS Desktop share a common database so changes are applied to both systems) - TRMC-5000 2.1, 2.2.

E. Product List/Inventory - TRMC-5000 2.1, 2.2.

F. IDMS Maintenance (Print Request maintenance, Ship Methods, Program, Account, and User Management (product security/access control, and user permissions) - TRMC-5000 2.1, 2.2.

G. Warehouse Product processing (Product receipt, Invoice processing (Pulling product, packing product, shipping product) - TRMC-5000 2.1, 2.2.

H. Export IDMS GTA product information to TS-MATS - TRMC-5000 2.1, 2.2.

5.1.3.13. Manage and report TSS Program Mission Essential Requirements (MER)

These FPs are attributed to the TSIMS and ATSC-TSAID. Related BUCs include: ATDC-4017 2.3.

A. Track and manage Products, Services, and Facilities.

B. Capture Program Enabler Requirements (REQ) form Capabilities Requirements Documents (CRD) and Basis of Issue Plans (BOIP).

C. Capture manpower REQs from HQDA Manpower Models and authorizations (AUTH) from FMSWeb.

D. Capture specified Facility data elements from the Installation Status Report (ISR).

E. Manage TSS Program Enabler On-Hand (O/H) values.

F. Manage TSS Program Enabler Fielding and MILCON to project changes to O/H values over the POM.

G. Track and report TSS Program Enabler Status (O/H vs REQ) against established Metrics (R-A-G).

H. Project TSS Program Enabler Status (for POM years).

I. Manage training support by TSS Program (STSP, MCTSP, Ranges, Training Land, Points of Delivery) and by training environment (Live and Synthetic) - ATDC-4017 2.2.

J. Apply TSS Program Enabler data to Geo-spatial Information Systems (GIS) functionality and products to better portray TSS Program capability and capacity - ATDC-4017 2.2, TRMC 5009 2.2, 2.3.

5.1.3.14. Army Range Mapper (ARM) SRP Regional Support System for USAREUR

These FPs are attributed to the ARM and USAREUR 7ATC/TSAE.

A. Manage users from the warfighter community, range safety personnel, trainers and training planners across USAREUR's area of operations.
B. Provide the authoritative repository for the US Army Sustainable Range Program (SRP) Regional Support Center located in Grafenwoehr Training Area, Germany.
C. Standardize data development and disseminate information as mandated by HQDA G-3/5/7 DAMO-TRS.
D. Serve as the Department of the Army geodatabase of record for multinational Theatre Security Cooperation and Exercise site locations. Support the Tap In application to allow users to search training support facility locations, view facility-specific information, query real-time and future scheduling data, view vector and high-resolution imagery base maps and download products (e.g., SOPs, operating handbooks, maps, etc.) across multiple Unified Combatant Commands.

5.1.4. Army Training Development Capability (ATDC)

The ATDC enables development and management of individual and collective learning products (e.g., tasks, lesson plans, drills, TSPs, CATS, POIs, and STRAPs) to include Warfighter TSPs with proponent-approved training methods and standards. It provides automated workflow staffing, product approvals, and the approved products are published directly to the CAR. ATDC also shares products/data with external processes (via EASS capability) for approvals and resourcing outside of ATDC (e.g., ITMMT, TRMIS). It incorporates analytical tools for decision making and managing products and resources. These tools enable deep dive analysis, query, and reports for the complete product inventory, workflow and revision history, and organizational administration. Analytics also support build of CATS to ensure unit battle and individual tasks are properly linked to MET competencies and related or nested tasks. ATDC provides other tools to automate (up front) job, task, and mission analysis for both organizations and developers. This includes import of non-training information and table data directly from source (reference catalogs, FedLog, ammunition, MOS/AOC/ASI, MTO&Es, TADSS, etc.). Additionally, units have the ability to build and manage the TO&E executable unit task list.

5.1.4.1. Develop / Distribute / Maintain Army Learning Products

These FPs are attributed to the TDC and ArmyU VPLS. Related BUCs include: ATDC 4014 2.3, ATDC 4015 2.1, ATDC 4022 2.1, ATDC-4000 2.1, ATDC-4003 2.1, ATDC-4004 2.1, ATDC-4005 2.1, 2.2, ATDC-4006 2.1, ATDC-4006 2.2, ATDC-4010 2.1, 2.2, ATDC-4012 2.1, ATDC-4013 2.1, 2.2, ATDC-4014 2.1, 2.2, ATDC-4017 2.1, ATDC-4017, 2.2, 2.3, ATDC-4018 2.1, ATDC-4019 2.1, ATDC-4020 2.1, 2.2, ATDC-4020 2.3, ATMC-2003 2.1.

A. Warfighter Training Support Package (WTSP).
B. Soldier Training Publication (STP).
C. Unit Task List (UTL).
D. Drill Tasks.
E. Course Master.
F. Course Administrative Data (CAD).
G. Program of Instruction (POI).
H. Individual Student Assessment Plan (ISAP).
I. Master Evaluation Plan (MEP).
J. Individual Task.
K. Collective task.
L. Individual Critical Task List (ICTL).
M. Lesson Plan.
N. Combined Arms Training Strategy (CATS).
O. Army Warrior Task (AWT).

P. Data Maintenance Tables.
Q. Training Developer Workload Estimate.
R. Mission Essential Task List (METL).
S. System Training Plan (STRAP).

5.1.4.2. Export learning products and Data from Training Development System

These FPs are attributed to the TDC, ArmyU-VPLS and TPO ATIS-ATIA. Related BUCs include: ATDC-4000 2.1, ATDC-4003 2.1, ATDC-4004 2.1, ATDC-4005 2.1, 2.2, ATDC-4006 2.1, 2.2, ATDC-4010 2.1, 2.2.

A. Export approved learning products to repository IOT facilitate Soldier access. (Currently TDCPub exports to the CAR).
B. ITMMT pulls CAD and POI data.
C. TRMIS (formerly CLTM) pulls CAD and POI data .
D. ITMMT, TOMA, and TRMIS (formerly CLTM) provide data to POM for funding of Army Training.
E. DTMS pulls Individual Tasks, Collective Tasks, Drills, and ICTLs from CAR.
F. ArmyU Course Catalog pulls POI information from the CAR.
G. Army Career Tracker pulls ICTL and Individual Tasks from the CAR.
H. Army Training Network (ATN) pulls Individual and Collective Tasks, Drills, and UTLs from the CAR.

5.1.4.3. Roles, Domains, POI Proponent Codes, School Codes, and Notifications

These FPs are attributed to the TDC, ArmyU-VPLS and TPO ATIS-ATIA. Related BUCs include: ATDC-4001 2.1, ATDC-4021 2.1, ATDC-4000 2.1.

A. User Roles.
B. Administrative Roles.
C. Security Domains and Subdomains.
D. POI Proponent Codes and School Codes.
E. Notifications.
F. Automated Notification for Learning Product Creation/Update.

5.1.4.4. Enhanced Report Functions and Custom Queries

These FPs are attributed to the TDC, ArmyU-VPLS and TPO ATIS-ATIA. Related BUCs include: ATMC-2000 2.6, ATMC-2019 2.1, TESC-2001 2.3, TRMC-5006 2.2.

A. Generate Reports for all learning products.
B. Product/User Report.
C. User statistics.
D. Custom Queries and Reports.
E. Enhanced Analytical Reports by Proponent.
F. PGD's Workload Management Branch Reports.
G. Generate G8 reports accounting for TD workload needs.

5.1.4.5. System Usability

These FPs are attributed to the TDC, ArmyU-VPLS and TPO ATIS-ATIA. Related BUCs include: ATMC-2000 2.6, ATMC-2019 2.1, TESC-2001 2.3, TRMC-5006 2.2.

A. Use of Tab, Enter, and other intuitive functions**.**
B. Help Services**.**
C. User Dashboard.
D. Intuitive Learning Product Builder Interface.
E. Automated Instantaneous Quality Assurance & Quality Control Feedback.
F. Embedded Training Capability.

5.1.4.6. System Training Plan (STRAP) Document Development

These FPs are attributed to the SWT and ATSC-TSAID. Related BUCs include: ATDC-4008 2.1, ATDC-4022 2.4, TRMC-5000 2.1, EASS-6004 2.4.

A. Access SWT.
B. Initiate a STRAP.
C. Write a STRAP.
D. Staff a STRAP Document.
    1. STRAP Peer Staffing.
    2. STRAP Army Wide Staffing.
    3. STRAP Approval Staffing.
    4. STRAP Final Approval Staffing.
E. Register a STRAP to the Central Army Registry (CAR) - ATDC-4008 2.1, ATDC-4022 2.4, TRMC-5000 2.1, EASS-6004 2.4, EASS-6010 2.1.
F. System and user administration - ATDC-4008 2.1, ATDC-4022 2.4, TRMC-5000 2.1, EASS-6004 2.4.
    1. Users.
    2. Agencies.
    3. Documents.
    4. Reports.
    5. Notifications.
    6. Utilities.
G. Export STRAP to the CAR (external interface) - ATDC-4008 2.1, ATDC-4022 2.4, TRMC-5000 2.1, EASS-6004 2.4, EASS-6010 2.1.
H. Soldiers able to access STRAPs - ATDC-4008 2.1, ATDC-4022 2.4, TRMC-5000 2.1, EASS-6004 2.4, EASS-6010 2.3.

5.1.4.7. Develop Combined Arms Training Strategies (CATS)

These FPs are attributed to the CATS Builder and CAC-T TMD. Related BUCs include: TESC-1003 2.3, TESC-1004 2.1, TRMC-5009 2.10, ATDC-4008 2.1, ATDC-4010 2.1.

A. Develop Task Sets with event recommendations to group collective tasks, drills, and individual tasks that logically train together and provide proponent-approved training methods and standards. - TESC-1003 2.3, TESC-1004 2.1, TRMC-5009 2.10, ATDC-4008 2.1, ATDC-4010 2.1.
B. Provide analytical tools within the training development capability to assist with the training analysis to ensure that the tasks indicate linkages that nest necessary competencies from the

mission essential tasks (MET), through the platoon and other small unit battle task, down to the individual tasks - TESC-1003 2.3, TESC-1004 2.1, TRMC-5009 2.10, ATDC-4008 2.1, ATDC-4010 2.1.

C. Make CATS available to users as a stand-alone report; and/or…

D. Provide the foundational data for planning tools.

5.1.4.8. Develop Distributed Learning Courseware

These FPs are attributed to the ECDC and TPO ATIS-CIT. Related BUCs include: ATDC-4014 2.1,2.2, 2.3. Note that these FPs are for courseware developed "outside" of the training development system.

A. Provide automated updates from authoritative POI/courseware sources and have the ability develop, store, reuse, and deliver digital learning content (e.g., DLS, ALCMC, TDC, CAR) - ATDC-4014 2.2, ALCMC-3000 2.1, ATMC-2000 2.4.

B. Maintain distributed learning content reuse library through a centralized repository - EASS-6000 2.1, ALCMC-3000 2.1.

C. Provide the capability to upload large amounts of data directly into the DL Development process - EASS-6000 2.1.

D. Provide the ability edit content, sequence and re-arrange modules TLOs and ELOs and able to display "Story Board" branching decisioning diagram capability - ATDC-4014 2.1, 2.2.

E. Provide a "Text to Speech" capability - ALCMC-3000 2.1, ATMC-2000 2.4.

F. Provide Configuration Management Version Control; including how-to guides and instructions - EASS-6004 2.4.

G. Maintain library with fully indexable and searchable (includes meta-data elements) - EASS-6000 2.1.

H. Manage workflow process of e-learning development (e.g., role-based and task assignments) - ATDC-4014 2.1, 2.2.

I. Import and export courseware (includes 3-D objects, publishing / distribution etc.) - EASS-6000 2.1.

5.1.5. Army Learning Content Management Capability (ALCMC)

In addition to structured learning content and management, professional development tools allow Soldiers and Civilians to seek mentorship and determine a path to achieve career goals consistent with their occupational specialty or career field/functional area. For learning content management, ATIS incorporates the functionality of LLC and DLS, to provide support for resident, blended, and self-development instructional capability to include course workflow management through role-based permissions. Other capability includes distributed learning courseware authoring tools similar to ECDC. ALCMC provides career and professional development functions, such as ACT and WebTED, that enable training requests, approval, management, and reporting for the purpose of Individual Development Planning. ATIS provides web content management, similar to DTMS/ATN, and facilitates strategic communications. It integrates Army University processes and tools to catalog courses, interface with governmental agencies, and distributed learning resource models.

5.1.5.1. ArmyU Directorate of Distributed Learning

These FPs are attributed to the ArmyU-DDL. Related BUCs include: ATDC-4014 2.2, 2.3 ATMC-2004 2.1, ATMC-2009 2.4.

A. DL Resource model.

B. DL Courseware nomination.

C. DL Courseware repository.

5.1.5.2. Provide a venue for proponents, organizations, or Army leaders to share training best practices, non-standard training products, or strategic communication that affects training

These FPs are attributed to the ATMS-ATN and CAC-T TMD. Related BUCs include: ALCMC-3000 2.1, 2.2, EASS-6001 2.1, EASS-6002 2.1, EASS-6004 2.1.

A. Provide web content management using widgets and formatting features (bullet points, tables, pre-defined CSS styles, and easily inserted multi-media).
B. Provide configurable, templated web modules for common scenarios, such as navigation menus, data lists, forums, and personalized product "ruck sacks."
C. Provide web content management of libraries to store images, audio, video, PDFs, interactive multi-media instruction, and presentations that can be uploaded in accordance with business rules.
D. Provide web content management tools to facilitate strategic communication in multiple forms, such as newsletters, announcement banners, pop-up alerts, and survey tools with analytics (a/b tests, Likert scale, etc.).
E. Provide analytical tools that allow website content managers to define and track the actions of system users / website visitors with parameters such as page visits, deficiencies / error logs, form submissions, newsletter subscriptions, internal searches, user demographics, products added to user "ruck sacks," help desk engagement, and mobile training team bookings.

5.1.5.3. Individual Development Plan (IDP) and Career Professional Development Model (PDM) (ACT)

These FPs are attributed to the ACT and TRADOC G-37. Related BUCs include: ALCMC-3001 2.1, ATMC-2000 2.3, ATMC-2008 2.2, ATMC-2022 2.3.

A. Exportable Career Maps.
B. PDM Administrator.
C. Individual Development Plans (IDPs).
D. IDP Individual Dashboard.
E. IDP Supervisor Dashboard.
F. IDP Career Program Manager (CPM) Dashboard.
G. IDP Reporting.
H. Supervisor/Subordinate Selection (Link-Up).

5.1.5.4. Personnel Profile Administration (WebTed)

These FPs are attributed to the WebTed and AMC G-1 TED Team. Related BUCs include: ATMC-2017 2.1, 2.2.

A. Identify Individual, non-repudiation.
B. Identify Organization/Chain of Command - ATMC-2005 2.1.
C. Identify location (region, state, locality) - ATMC-2005 2.1.
D. Identify Supervisor/Administration/Approval Chain - ATMC-2009 2.1.
E. Identify Employee by type (military, civilian, contractor, intern, matrix, local national).
F. Identify Employee by career plan or program (MOS, Job Series, Grade) - ATMC-2008 2.1.
G. Identify Employee by role (Employee, Supervisor, Administrator, Financial Approval) - ATMC-2009 2.1.

5.1.5.5. Training Management and IDP (WebTed)

These FPs are attributed to the WebTed and AMC G-1 TED Team. Related BUCs include: ALCMC-3001 2.1, ALCMC-3000 2.2, ATMC 2000 2.1, 2.2, 2.3,2.4, ATMC-2001 2.1, ATMC-2002 2.1, ATMC-2003 2.1, ATMC-2004 2.1, ATMC-2005 2.1, ATMC-2008 2.1, 2.2, 2.3,2.4, ATMC-2009 2.1, ATMC-2016 2.1, ATMC-2017 2.1, 2.2, ATMC-2018 2.1, ATMC-2019 2.2, ATMC-2019 2.2, 2.3, TESC-1002 2.1.

A. Manage training requests (SF182 process).
B. Class management, ability to build, manage local classes.
C. Push training to specific organizations based on training requirements to personnel that fall under them for specific training requirements.
D. Ability to lock classes to a specific location or organization (state, installation, specific org by business center, training center, and/or office symbol).
E. Reporting capability at all user levels to manage training, IDP, etc.
F. Ad Hoc report that provides ability to pull customized report data on any class.
G. Mandatory training reports.
H. Variety of Acquisition Workforce management reports.
I. Individual Development Plan (IDP) reports.
    1. Ability for employees to build IDP for supervisor review and digital approval.
    2. Ability for supervisor to build an employee's IDP (non-computer access; Wage Grade).
    3. Ability for training coordinators to add and manage training on an employee's IDP, Reporting on IDP, IDP approvals by supervisor, and IDP approvals for organization.

5.1.6. Enterprise Architecture Standards and Services (EASS)

The EASS is the engine and data core for ATIS. It synchronizes/shares data across the five capability areas of a single point entry enterprise capability which eliminates the need to enter the same data in multiple training and education systems. It provides standard generalized web services to simplify data exchange and information sharing with external systems. EASS includes a Central Army Registry (CAR) for users to find, upload, and access learning products and information. It publishes products directly from the training development tools within ATDC. EASS provides user dashboards, landing page, intuitive prompts and help features and enterprise help services (i.e., trouble ticket, technical support, mentorship, virtual assistance, and knowledge center/self-help).

5.1.6.1. CAR

These FPs are attributed to the CAR and TPO ATIS-ATIA. Related BUCs include: ALCMC-3000 2.1, 2.2, EASS-2006 2.2, EASS-6004 2.4, EASS-6010 2.1, 2.3.

A. Provide Dashboard links
    1. To TAG, MT2, ATHD, Army Social, Help functions.
    2. To ATIA functions for Search, Rucksack, Tagging, Register (admin role), Reports generation (CAR/TAG products). Security (assign control of users).
    3. Direct access to CAR search function.
    4. Direct access to Rucksack function.
    5. Browse and refinement filter search for CAR Products.
    6. List of recently edited by admin.
    7. List of recently added (30 Days).
    8. DOD Banner.
B. Security Management - EASS-6004 2.2, 2.3.
    1. Access Control Lists – user access to specific products (resources) by Knowledge Center, User ID, User Group, and Resource Group X.

2. Knowledge Centers - Admin users assigned to Knowledge Centers (proponents).
3. Admin Users - User IDs, Account types, assigned roles, Last Login.
4. Resource Groups - Lists resources assigned to Knowledge Centers and Access Control Lists.
5. User Groups - Lists users assigned to specific Knowledge Centers and Access Control Lists.
6. Users - Authenticated CAR users by Account Type, Last Login Distribution Restriction Level, Role, and Knowledge Center.

C. Register Functions - EASS-6008 2.2, EASS-6010 2.2, 2.3, TESC-1001 2.1, 2.2, TESC-1002 2.1, 2.4, TESC-1003 2.1.
1. Register Training Products.
   a. Product content stored in CAR.
   b. Link to product content stored remotely.
2. Register product metadata for:
   a. Name and ID.
   b. Owner.
   c. Distribution and foreign restrictions.
   d. Doctrinal/other product type.
   e. Dates.
   f. POC.
   g. Discoverability Y/N.
   h. Aliases, URL and Joint.

D. Product Search and Access - EASS-6004 2.2, EASS 6010 2.1, 2.3.
1. Keyword Search and filter discovery of training products published to the CAR.
2. Distribution restriction-controlled viewing and download of training products published to the CAR.
3. Provide info for:
   a. Proponent.
   b. Distribution restriction.
   c. Release Status.
   d. Approval / Effective dates.
   e. Zip package content download link.
   f. QR code for Mobile device access.
4. Product Tagging function for recall.
5. User Sharable Rucksack function for focused recall.

E. Receive TDC / SWT Publications - ATDC-4005 2.1, 2.2, ATDC-4006 2.1, 2.2 ATDC-4009 2.1, ATDC-4010 2.1, 2.2, ATDC-4013 2.1, 2.2.
1. TDC.
   a. Receives via System Interface Services.
   b. Soldiers able to access ICTL, Individual Task, Collective Task and Drills.
   c. DTMS pulls Individual Tasks and Collective Tasks from CAR.
   d. ITMMT and TOMA pull CAD and POI data.
   e. CLTM pulls POI data.
   f. ITMMT, TOMA, and CLTM provide data to POM for funding of Army Training.
2. SWT - Receives via System Interface Services.

5.1.6.2. Landing page (e.g., MT2, ATN, SRP, etc.)

These FPs are attributed to the TPO ATIS-ATIA. Related BUCs include: EASS-6002 2.1, 2.2.

A. Links to Army Training Network, CAR, TAG, Army Training Help Desk
B. Users have access to 29 Gadgets which may displayed according to user preference
C. Gadgets provide links to learning content on various Army or Joint sites
D. Gadget may be:
    1. Created and maintained in ATIA
    2. Be linked to contain mini web page maintained by gadget proponent

5.1.6.3. External system APIs (e.g., SIS)

A. Obtaining authoritative data from other systems and application of business rules
B. Providing ATIS authoritative data to other systems through enterprise services

5.1.6.4. TAG

These FPs are attributed to the TPO ATIS-ATIA. Related BUCs include: (EASS-6008 2.1, 2.2)

A. Repository for Army approved apps
B. Enables authorized users to:
    1. Search, browse, and filter for apps
    2. Download apps for installation on compatible devices
    3. Provide ratings and comments about apps
C. Main page has links for CAR and MT2, and search and sort
D. Admin user:
E. Registers Android, iOS, and Progressive Web
    1. May register apps with URL link to an external App store
    2. Edit, copy, and delete app records

5.1.6.5. Administration module and permissions

This FP is attributed to the TPO ATIS-ATIA.

5.1.6.6. Enterprise ATHD

This FP is attributed to the TPO ATIS-ATIA. Related BUCs include: EASS-6002 2.1, 2.2.

A. Federated ATHD

5.1.6.7. Instrumentation of ATIS features

This FP is attributed to the TPO ATIS-ATIA.

5.2. ATIS Data Technical Solution

The ATIS data technical solution will consist of services that run in multiple cARMY accounts. CReATE services include: GitLab – which provides Code Repository, DevSecOps pipelines, Managed Kubernetes Clusters, Database hosting, and External Interfaces. See Figure 9: Hybrid Solution of ATIS/CReATE below. The ATIS Objective Environment includes: Business Process Management (i.e., workflow tool),

Scheduler, Migrated legacy systems, Data Centric Architecture, External Interfaces, and cARMY managed services such as: ServiceNow, Splunk and MuleSoft.

For the “Data Layer” of the ATIS, the Army is also using Other Transactional Authority (OTA) agreements to develop a baseline prototype for a common data environment to serve as the single consolidation point for all authoritative data supporting the ALE process. Additionally, all systems owned and managed by ATIS will have a single-entry point to store, administer, and distribute data across the DoD and Army IT enterprise. Data will easily and securely be distributed across the Army and external agencies to enable data professionals. The purpose of this authoritative data repository is to ensure that all consumers of the data are using the correct, unaltered data and increase the confidence in derived insights. It will allow data consumers to reduce the number of data interfaces that they must maintain.

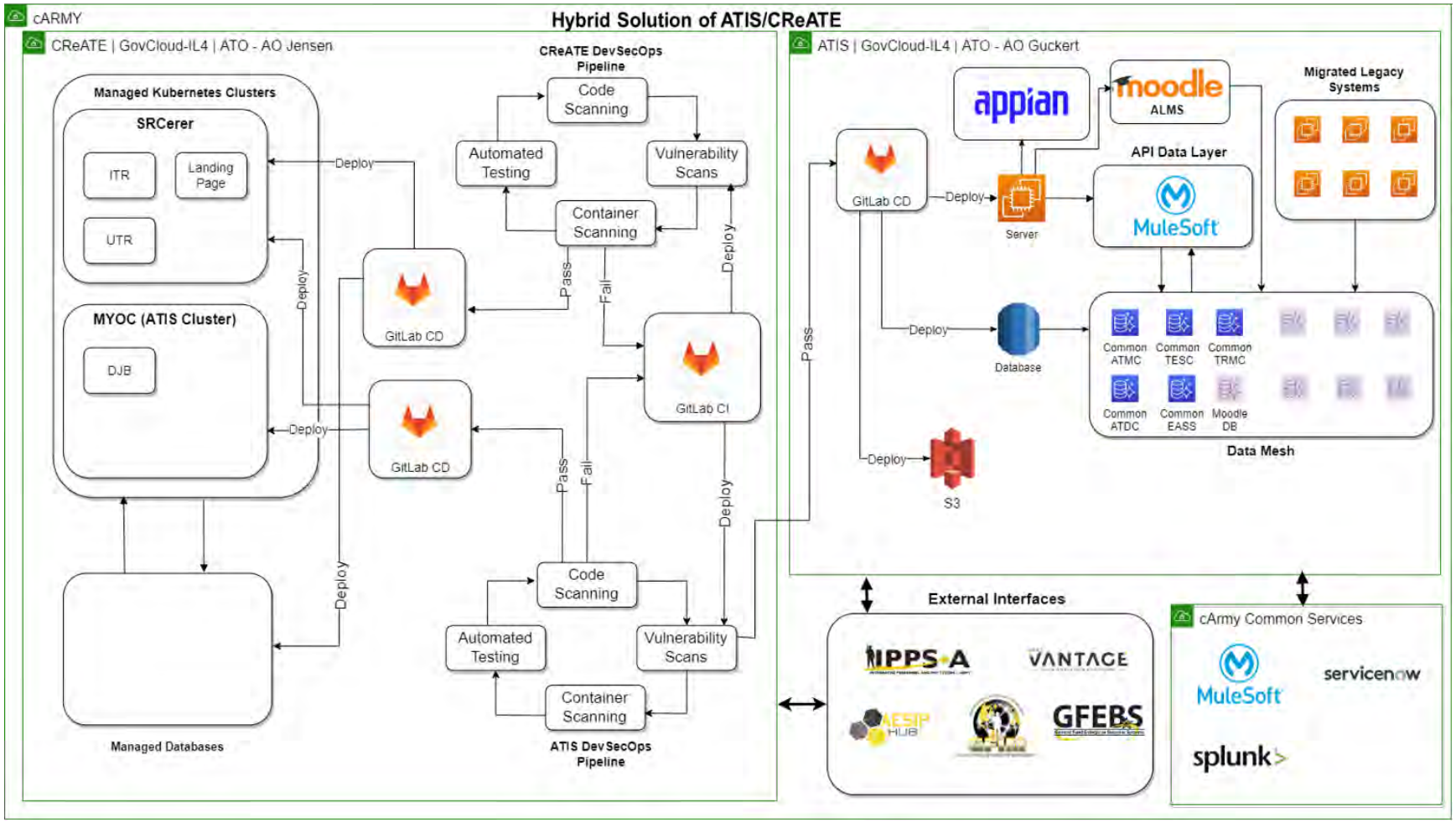

Figure 9: Hybrid Solution of ATIS/CReATE

5.3. Governance, Organizational Leadership, and Resources

Figure 10 illustrates an integrated governance structure for ATIS.

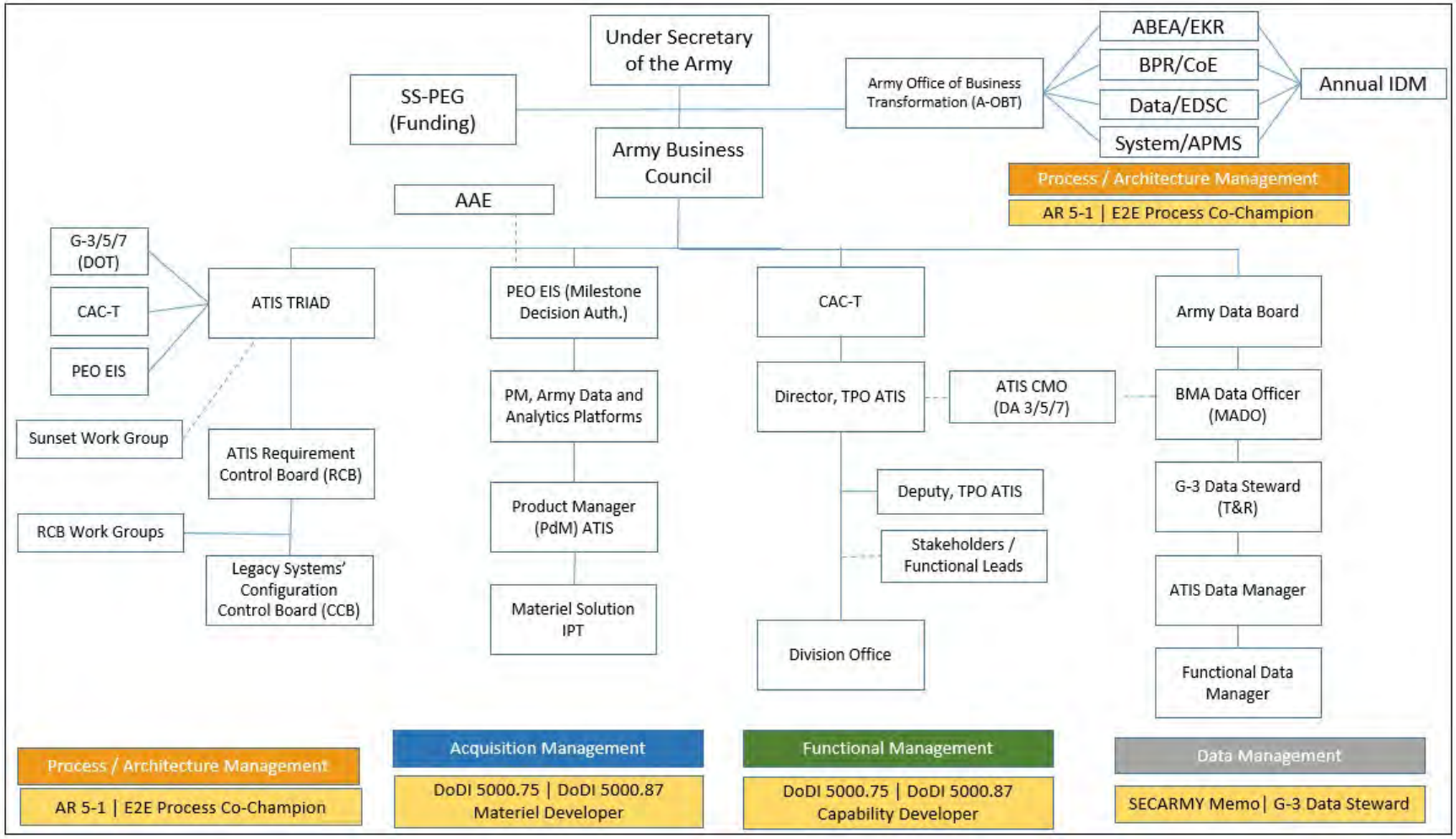

Figure 10: Governance Structure

5.3.1. Process/Architecture Management

Due to the integration of Business Process Reengineering (BPR) planning and execution efforts coordinated between HQDA G-3/5/7 and Enterprise Business Systems – Convergence – Multi-Functional Capabilities Team (EBS-C MFCT), ATIS end to end (E2E) will be integrated into the Deploy to Redeploy/Retrograde (D2RR) E2E process and enterprise architecture products (including capability process maps) as needed. The EBS-C-MFCT Director and HQDA G-3/5/7 Director of Strategic Operations approved the creation of a Joint D2RR Council of Colonels (CoC) and General Officer Steering Committee to review and vet products prior to bringing to the D2RR Tri-Chair Council for approval. Required outputs from aligned ATIS BPRs will be documented in the Army's EKR in accordance with standards, notations, and other requirements. At the action officer level, a D2RR-ATIS working group will be formed for each of the aligned D2RR Level 1 business processes. The assigned D2RR OPR for each Level 1 business process is responsible for coordination and synchronization across functional community stakeholders, while the ATIS Capability Management Officer (CMO) embeds BPR professionals skilled in Business Process Modeling Notation (BPMN) to design capability process maps (i.e., DoDAF viewpoint artifacts). Any potential new requirements that are derived from functional community products or analyses of the current (as-is) and future (to-be) states will be documented in a standardized template provided and consolidated by ATIS CMO for inclusion into the functional management lane described directly below. As one of the designated co-process champions inherent in AR 5-1 (Management of Army Business Operations), there are critical policy requirements this governance lane will comply with.

5.3.2. Functional Management

This governance lane provides overall functional capability development and requirements determination/management for the ATIS OE. The ATIS was designated as a defense business system (DBS)--no longer governed under JCIDS—by A-OBT in July 2013. The Army Acquisition Executive (AAE) published the ATIS Acquisition Decision Memorandum (ADM) on 7 October 2014. The DoDI 5000.75 (Business Systems Requirements and Acquisition) published in February 2017 covers DBS acquisition. The ATIS IT Functional Requirements were approved by the Army Office of Business Transformation (A-OBT) as delegated by the Undersecretary of the Army, On 16 January 2020. The Office of Business Transformation issued a "End of Development and Modernization of Army Legacy Training Information Systems" memorandum, directing that ATIS Legacy Systems cease ungoverned improvements on 26 February 2020. The ATIS Acquisition Milestone Decision Authority approved entry into the Acquisition, Testing and Deployment (AT&E) Phase, BCAC Phase 4, on 20 May 2020. On 9 November 2020, the DOT, G-3/5/7 signed the ATIS Requirements Control Board (RCB) charter to serve as the governing body for ATIS IT design, requirements, policies, regulations; and to oversee the coordination and alignment with the direction of the Army Acquisition Executive to execute an ATIS IT enterprise. The development and implementation of ATIS as a DBS necessitates a stand-alone governance lane dedicated to functional governance and requirements management. A subordinate ATIS Stakeholder Update will convene monthly to monitor and guide the requirements development process for ATIS OE, including Army Business Process Reengineering (BPR) implementation actions. Additionally, the ATIS CoC will receive updates and analyze potential new requirements nominated into D2RR and/or Joint GFM functional community stakeholders. Potential emerging requirements are derived from multiple sources, including: (a) D2RR BPR workshops/working groups; (b) ATIS Materiel Solution IPT; (c) G-3 Functional Data Managers; (d) leadership directed requirements; and (e) ATIS and Joint Sister Service functional community stakeholders. These requirement nominations are routed through the RCB structure to appropriate decision authorities. A separate TSS Requirements Council will meet as needed to review, analyze, vet, and validate materiel solution requirements within their area. The ATIS OE functional proponent will assist in the determination of the appropriate forum. The 1/2-star GOSC will meet monthly (or as needed) to approve requirements, resolve issues, or provide shaping guidance. A 3-star GOSC will convene as needed when determined as necessary by the 1/2-star ATIS GOSC. Additionally, given HQDA G-3/5/7 has the responsibility for leading ATIS implementation for the Army, this governance lane will provide status updates to key leadership and approve any ATIS products or updates prior to submission to the Joint Capabilities Board participation when ATIS is a topic of interest.

5.3.3. Acquisition Management

This lane is managed by the materiel development community in accordance with roles and responsibilities prescribed to the Program Manager and Milestone Decision Authority (MDA) in DoDI 5000.75. The ATIS Product Office will support the HQDA G-3/5/7 in helping shape requirements and position for successful program management. A subordinate ATIS Materiel Solution Integrated Product Team (IPT) will be managed by the ATIS Product Office and convene bi-weekly to plan, manage, and execute materiel development actions. The Program Executive Officer Enterprise Information Systems (PEO EIS) is a member on the 1/2-Star ATIS GOSC to ensure senior leadership coordination and synchronization between functional management and acquisition management. HQDA G-3/5/7 will support ATIS Product Office in providing validated and approved requirements and coordinating for resource management of the ATIS OE. ATIS CMO provides participation at the bi-weekly ATIS Materiel Solution IPT. If ATIS OE requirement nominations are identified in this forum, ATIS CMO will integrate those into the Functional Management structure identified above, ensuring they fit into the right materiel solution forum.

5.3.4. Data Management

Central to the Army Data Plan (ADP) goal to weaponize data for information dominance is adherence to Army data governance responsibilities of Mission Area Data Officers (MADO), Data Stewards, and Functional Data Managers (FDM). The ATIS CMO within HQDA G-37/DAMO-SOE serves as the HQDA G-3/5/7 Data Steward and is overall responsible for improving the speed, accuracy, and effectiveness of leveraging HQDA G-3/5/7 data in support of Army missions. As the designated HQDA G-3/5/7 Data Steward, the ATIS CMO will report to the BMA MADO and T&R Domain Lead. Specific examples of responsibilities include: (a) authoritative decision-making across ATIS portfolio, D2RR E2E business process, and ATIS implementation compliance; (b) developing and maintaining data architecture; (c) ensuring data architecture consistency; (d) designating, assigning, and tasking HQDA G-3/5/7 FDMs; (e) working with BMA MADO and T&R Domain Lead to identify and approve data initiatives; and (f) prioritizing initiatives based on the impact to mission objectives and data analytics goals. The HQDA G-3/5/7 Data Steward also serves as the Chairperson for the Requirements Council, resulting in the ability to vet and synchronize emerging data standards or requirements to the data layer of the ATIS OE.

5.4. Requirements Management

The ATIS Product Office or materiel developer will further define requirements and configuration management processes in the Capability Implementation Plan (CIP). The CIP will employ iterative project management methodology to guide the sprint planning, backlog planning, and development schedule required to produce the capabilities defined in the validated and approved requirements.

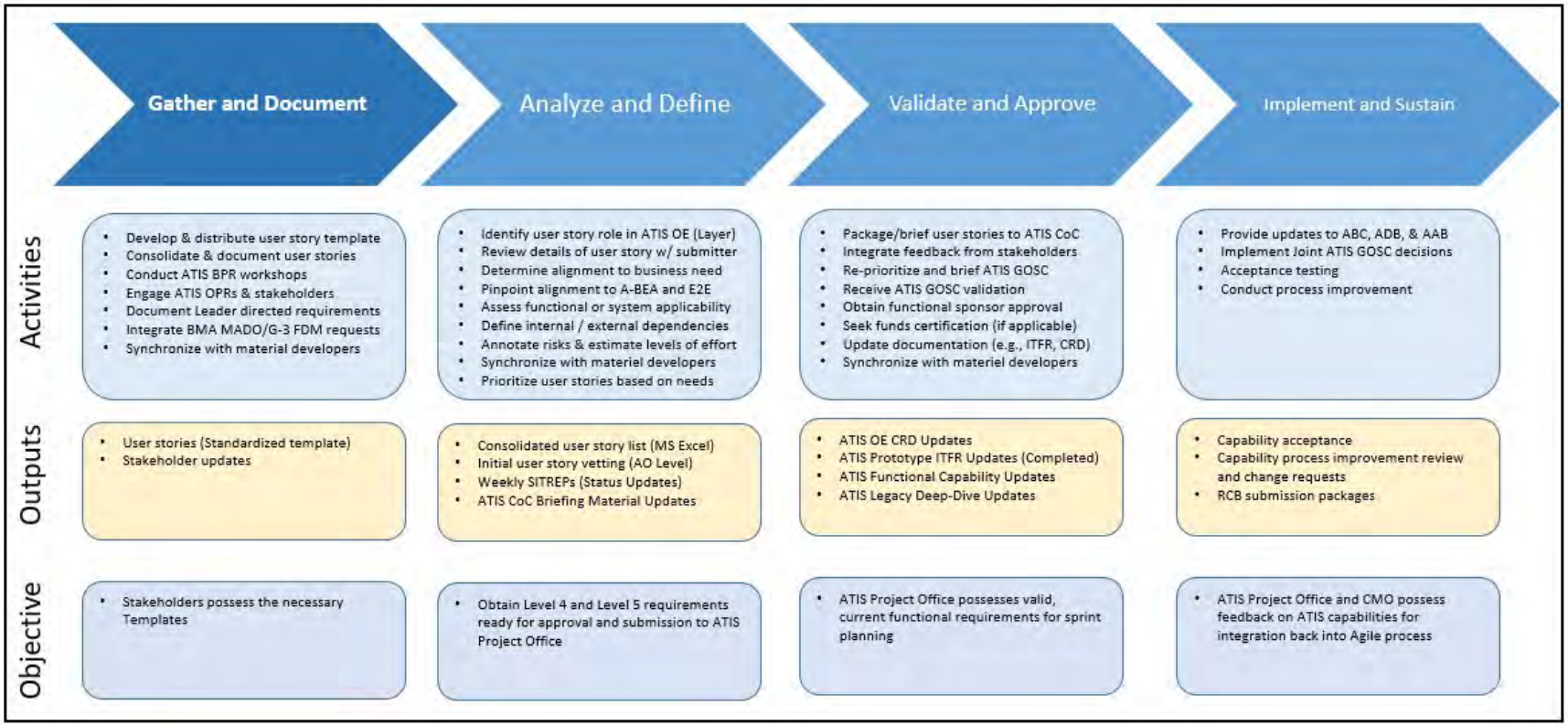

Figure 11: Requirements Management Methodology

5.5. Requirements Decomposition, Traceability, and Approval

5.5.1. TPO ATIS ITFR

The ATIS Information Technology Functional Requirements (ITFR), approved by Army Office of Business Transformation (A-OBT) 16 January 2020 (Delegated approving authority from Under Secretary of the Army), serves as the authoritative repository for ATIS Functional Requirements.

5.5.2. PdM ATIS RTM

The ATIS Requirements Traceability Matrix (RTM) is maintained by PdM ATIS for traceability to development efforts and testing. The RTM serves as a coordination document between functional and development teams.

5.5.3. PdM ATIS COIC

Critical requirements are already aligned with the Critical Operational Issues and Criteria (COICs) in the ATIS Test and Evaluation Master Plan (TEMP). Any changes to COICs will mean that ATEC will have to generate a new System Evaluation Plan (SEP). An approved ATEC ATIS TEMP is available from the PdM ATIS Configuration Manager.

5.5.4. PdM ATIS SEP

An approved Army Test and Evaluation Command (ATEC) ATIS System Evaluation Plan (SEP) is available from the PdM ATIS Configuration Manager.

5.6. Product Manager Development and Delivery Schedule (Draft)

See figure below for proposed draft schedule. PdM ATIS coordinates with TPO to determine prioritization of requirements for development of Minimum Viable Products (MVPs) every quarter. A prioritized combination of MVPs results in a Minimum Viable Capability Release (MVCR) – the first portion of usable software that can be fielded to users. Per the Software Acquisition Pathway, at least one MVCR must be deployed annually. See “Earliest Legacy System Sunset” row for proposed sunset timeline.

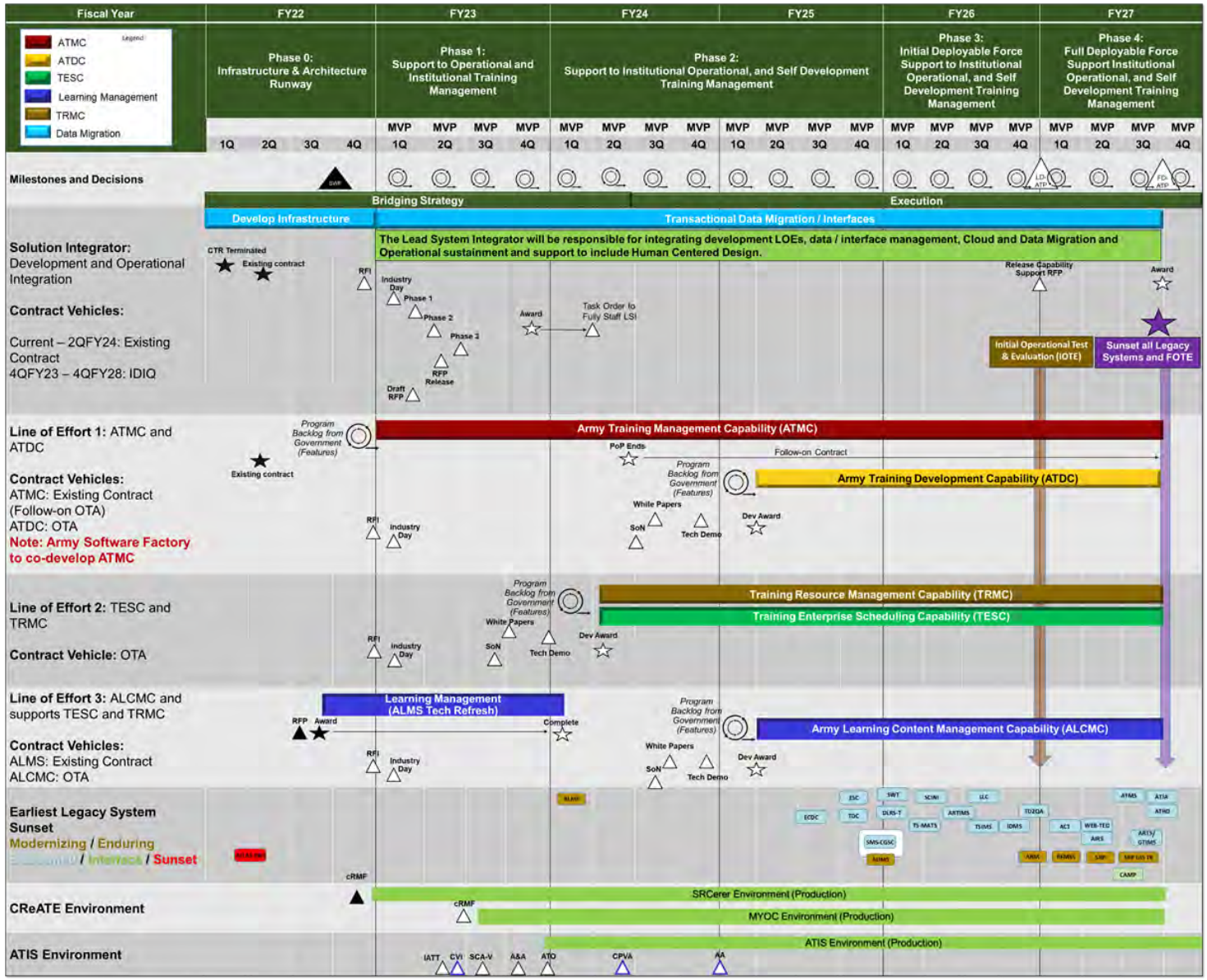

Figure 12: ATIS Development and Delivery Schedule (draft as of 19 August 2022)

Integration Factory provides the overarching ATIS development support functions to include Train/Deploy, Help Desk and Data. The Phases cut across each of the Lines of Effort (LOE). Each LOE is aligned with Functional Sponsor priorities, training management, training development, training resource management, enterprise scheduling and learning content management and further characterized to columns immediately to the right brightly colored boxes. Legacy Systems for Sunset are aligned within Phases and nested for sunset IAW Functional Sponsor development priorities, however despite the alignment -- which is primarily for development planning purposes -- no system can be sunset prior to obtaining an LD-ATP approval.

Technical reviews will occur as part of each Agile review point. These technical reviews include design analysis at beginning of each Sprint, Test Readiness Reviews prior to each Release. In addition, all technical approach will continually be adjusted as part of DevSecOps.

This Acquisition Strategy has been updated to support the first Release Decision. It supports continued activities within the AT&D Phase of the BCAC. ATIS is being iteratively developed and deployed.

5.6.1. Phase 0

Phase 0: In 2nd quarter, FY22, ATIS used existing IT service contracts hiring highly Skilled IT labor to form complete Architectural Runway, Core Shared Services, and Cross Functional development teams that are building the immediate priorities of the Objective ATIS. The foundation is an open, data-centric, data-mesh architecture within cArmy commercial cloud environment, this effort is currently underway and is expected to be complete by the quarter, FY22. The architecture will provide an environment where select legacy systems will be modernized and subsumed into the objective ATIS.

5.6.2. Phase 1

Phase 1: PdM ATIS will develop and deploy the top functional priorities based on the prioritized feature backlog determined during the Program Increment planning sessions. In this phase, the functional requirements will focus on developing the critical capabilities needed currently performed in the Digital Training Management System (DTMS). This current top functional priority of the initial delivery of capabilities include: Individual Training Record and Common Operational Picture functionality that is critical for individual Soldiers and Unit Leaders to manage training at echelon. This phase will also migrate and modernize the Army's Learning Management System (ALMS) the objective environment. Migration (to include cleansing and harmonizing) of data needed from legacy systems will be accomplished focusing on data requirements for the capabilities to be delivered. To meet functional requirements, this phase will also encompass specific capabilities in areas of Training Enterprise Scheduling, Training Development, and Training Resources Management that provide the necessary holistic functionality for Release. DTMS and ALMS are two of the largest legacy systems of the 28 legacy systems scheduled for sunsetting and provide substantial portions of the Training Management and Learning Content Management capabilities.

5.6.3. Phase 2

Phase 2: PdM ATIS will support, lead and oversee the integration of multiple Contractor development lines of effort and teams. Iterative migrations of the data from the legacy systems will enable full development of the other ATIS requirements; Army Training Management, Army Training Development, Training Resource Management, and Training Enterprise Scheduling, and Army Learning Content Management capabilities. Phase 2 is characterized by providing support to Institutional, Operational, and Self-Development Training Management. This Phase will continue the development of ATMC within LOE 1, in particular, providing Training Planning Tools to plan, prepare, and assess training. This Phase is further characterized by initiating the development of TESC / TRMC to provide training event scheduling, training / resource asset allocation management and installation support functionality for range and land scheduling / resource management required by the Army Operational, Intuitional and Self-development training domains. During 1QFY25, ATIS will award an OTA contract to develop ATDC within LOE 1 to enable training developers to create and manage training products. Also, in 1QFY25, ATIS will award a contract to develop the remaining portions of ALCMC within LOE 3 to facilitate the cataloging, management and delivery of learning content. This will effectively provide Operational and Institutional Training Management, Installation Training Support, and Training Enterprise Services Support.

5.6.4. Phase 3

Phase 3: PdM ATIS will support, lead and oversee the integration of multiple Contractor development lines of effort and teams to deliver Training Management, Training Development, Training Resource Management, and Training Enterprise Scheduling capabilities. Phase 3 is characterized primarily by developing an Initial Deployable Force Support to all training domains with an aim to subsume 8 additional legacy systems. With all LOEs contracted, the LSI Solution Integrator will continue to integrate all development efforts across the LOEs while supporting Operational efforts. LOE 1 will focus on the continued development of Training Planning Tools, Reserve Component Training Management, and creating and managing training products. LOE 2 will focus on Ranges / Land scheduling / resource management and Calendar / Scheduling Tools Support Tasks. LOE 3 will focus on Registrar and Distance Learning. The culmination of this development to this point will provide the Army initial deployable force support across all three training domains. This effort will deliver Operational and Institutional Training Management, Installation Training Support, and Training Enterprise Services Deployable Force Support. This phase based on level of risk and type of release may require Limited Deployment ATPs (LD-ATP). This ATP phase is normally associated with ATP 4 according to DoDI 5000.75.

5.6.5. Phase 4

Phase 4: ATIS will support, lead, and oversee the integration of multiple Contractor development lines of effort and teams to deliver Training Management, Training Development, Training Resource Management, and Training Enterprise Scheduling capabilities. Phase 4 is characterized by providing Full Deployable Force Support for training management across all three training domains with an aim to subsume all remaining legacy systems. The LSI Solution Integrator will continue to integrate all development efforts across the LOEs and will prepare ATIS operationally for full deployment. LOE 1 will focus on registrar support, WebTed support, and creating / managing training products. LOE 2 will focus on calendar and scheduling tools support tasks and enterprise capability provides all organizations an integrated picture of real estate (ranges and training areas), and movable things (TADSS and training ammunition). LOE 3 will focus on WebTed. This effort will deliver Operational and Institutional Training Management, Installation Training Support, and Training Enterprise Services Full Capability Support. This will result in the full subsumption of all legacy systems. Then will begin a Capability Support Phase characterized by Continuous Integration/Continuous Deployment (CI/CD) begins after Full Deployment (FD). Additionally, Post Implementation Reviews (PIRs) conducted by the proponent with support from PdM ATIS will ensure the continuous integration of technological innovations and capability sustainability.

5.6.6. Value Assessment

In parallel to the four builds above Value Assessments (VA) will be conducted periodically by the Government with support from the Contractor. VAs provide a “report card” for software developed and delivered. VA will be performed at least annually after the software is fielded to determine if the mission improvements or efficiencies realized from the delivered software are timely and worth the current and future investments from the end user perspective. More frequent value assessments are encouraged if practical. Army Shared/Managed Services will be leveraged, as feasible, in the provision of life-cycle support.

ATIS may adjust or change the phases as needed to ensure that the highest priority work is completed by the Contractor. The Army Software Factory will develop functionality starting with ATMC requirements closely working with ATIS Contractor development teams. To minimize duplication of effort and data rights issues, both Contractors and Software Factory will utilize the same environment, and jointly plan activities prior to any development work.

6. Rough Order of Magnitude

6.1. Rough Order of Magnitude (Cost Estimate)

6.1.1. Analysis of Alternatives (AoA)

The AoA Study Team was responsible for providing an analysis of each of five alternatives identified by the TSAG and shown in Table 17. One alternative (#4) was deleted from the study by the TSAG. The

2037 remaining four alternatives were determined to be viable in the Potential Alternative Workshop (PAW)
2038 (Final AoA report is available upon request).

2039

Table 17: ATIS Analysis of Alternative (AoA) Outcomes

Alternative 1 Status Quo (Base Case) will continue use of the Army's current multiple training information systems and databases.
Alternative 2 COTS/GOTS/ERP Combine and utilize existing Government-off-the-shelf and Commercial-off-the-shelf applications with existing Enterprise Resource Planning modules. *Language modified at 2 JUN 15 TSAG and was selected at the 9 NOV 15 TSAG.*
Alternative 3 Data Warehouse Consolidate all ATIS identified applications with an associated single Authoritative database (or warehouse) into one integrated, interoperable, and interdependent program, replacing legacy applications and their associated separate databases.
Alternative 4 Create a data reference model in accordance with the Federal Enterprise Architecture. Alternative 4 was d*eleted per TSAG decision on 2 DEC 14.*
Alternative 5 Highest Priority Identify the highest priority requirements and only consolidate those applications with an associated single authoritative database (or warehouse) into one integrated, interoperable, and interdependent program; all other legacy applications and their associated separate databases will remain in place and interface to the ATIS program.

6.1.2. Most viable alternative

After performing extensive analysis of the four final alternatives, the DASA-CE AoA Study Team recommended Alternative 2, COTS/GOTS/ERP as the most viable alternative because it:

- Provides all required capabilities
- Meets the affordability goal
- Significantly reduces total number of training information systems
- Eliminates system redundancy
- Avoids $304M to $801M BY15 over the Life Cycle
- Return on Investment (ROI) = 1.92 (higher is better) profitability to cost
- Benefit Cost Ratio (BCR) = 1.58 (higher is better) value to cost
- Achieves the T&E COP for management functions
- Enables centralized governance and access to authoritative data
- Complies with HQDA CIO/G6 Army Network Campaign Plan
- Risk is in line with comparable Information Technology Systems

6.1.3. Initial Cost Estimate (ROM)

Table 18 presents an initial rough order of magnitude (ROM) for cost estimation purposes.

Table 18: Initial Cost Estimate (ROM)

Overall Comparison of Alternatives	Financial ($M BY15)						Non-Financial ($M BY15)			
	NPV	Break Even (Year)	BCR (Higher is Better)	ROI (Higher is Better)	Cost (FY 16-32) $M	Cost Avoidance (FY16-32)	Performance Requirements (Exceeds, Meets, Not Acceptable)	Operational Benefits (Significant, Moderate, Low, None)	Managed Risk (Low, Med. High) G=Green, Y=Yellow, R=Red	Best Option
ALT #1 (FY16-32)	1,383	n/a	n/a	n/a	1,290	n/a	Not Acceptable	Low	1G (Low), 1Y (Med.), 5R (High)	
ALT #2	270	2026	1.58	1.92	489	304 -801	Meets	Significant	3G (Low), 1Y (Med.), 1R (high)	←
ALT #3	-277	NONE	-0.7	-0.3	1,070	220	Meets	Moderate	5G (Low), 1Y(Med.), 1R (High)	
ALT #5	256	2025	1.53	1.95	506	784	Not Acceptable	Moderate	4G(Low), 1Y(Med.), 1R(High)	

PART 2: BUSINESS SOLUTION ANALYSIS

7. Identify High-Level Business Processes

7.1. Initial Measures Development

In the 2013 timeframe, PEO EIS provided an acquisition PdM matrix support to assist then TPO ATIS in developing an Integrated Product Team (IPT) to identify what information systems would be candidates for ATIS subsumption (see Figure below). Team members from the DLS project office and TPO ATIS with key users were given a listing of over 1300 APMS systems with descriptions that included training or education. The IPT team identified approximately 49 candidates from the available APMS candidates. During the socialization some systems updated their APMS and asserted that they were not information systems but in fact enclaves that enabled resident IT applications. Leadership identified some systems to be enduring systems outside of ATIS consideration. One system was initially an interfacing system, but the Domain (HRM) requested that ATIS subsume functions related to training and education (ACT) which was directly associated with another candidate system (WebTed). Further analysis resulted in a final listing of 28 APMS systems for subsumption that was staffed through CAC-T, PEO-EIS and DCS G-3/5/7 DOT and presented in a decision paper for approval. A-OBT was delegated authority to approve the ITFR and subsumed systems which was signed on 16 Jan 20. Since this date, some systems funding has ceased, some have changed hosting platforms to comply with data center consolidation policy (pending ATIS deployment), and others have transitioned to new organizations. The candidate system owners were the 'pool' of Subject Matter Experts for the AoA requirement measures development planning and execution. The figure below shows the resulting team lead structure.

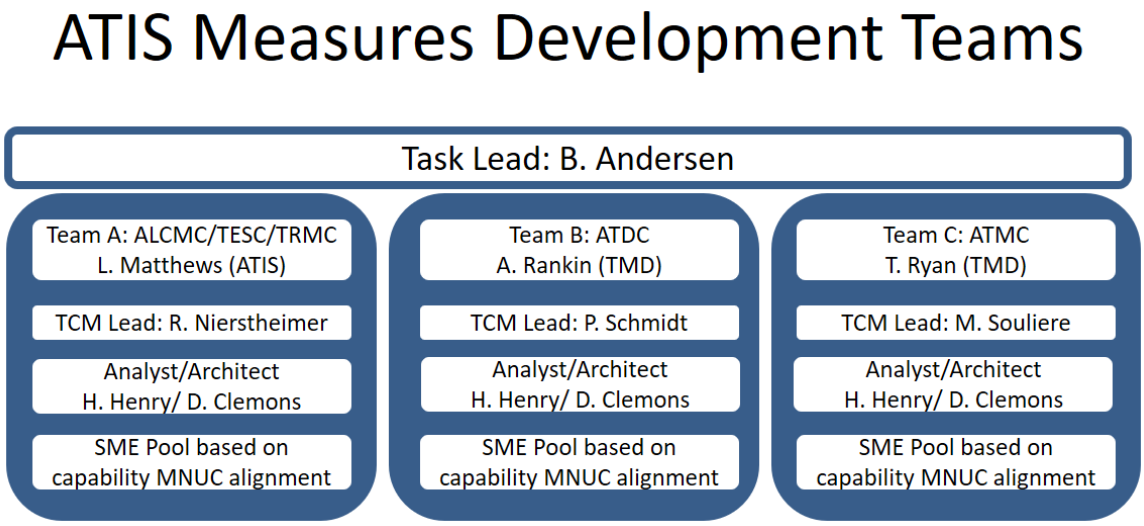

Figure 13: ATIS Measures Development Team Leads/Membership

7.2. Objective ATIS Automation/Orchestration Requirements

Over a 3-year period, TPO ATIS met with system owners to capture business function and workflow process requirements that objective ATIS must subsume as is, enhance, or create to satisfy mission needs across the training domains. System owners identified ~1400 measures of effectiveness (MoEs) and measures of performance (MoPs) to verify objective ATIS provides an appropriate level of automation/orchestration (e.g., workflow processes, approval routing, and auto completion of forms). This will alleviate the current need for work and coordination outside of legacy training information systems. User experience is improved by significant reduction of administrative time and burden. See Appendix F: Functional Requirement Automation Gap Assessments for more detail.

7.2.1. Consolidation of like functionality

Consolidating across the ATIS legacy systems, amalgamate systems that do the same/similar things. Legacy systems that are unique in their functionalities may only need modification to meet information needs among objective system requirements or enable enhancement to make user interactions more fluid.

7.2.2. ATIS essential efforts necessary to enable all goals includes

7.2.2.1. Architecture

DoD architecture, enabled by enterprise cloud and other technologies, must allow pivoting on data more rapidly than adversaries are able to Adapt.

7.2.2.2. Data Standards

DoD employs a family of standards that include not only commonly recognized approaches for the management and utilization of data assets, but also proven and successful methods for representing and sharing data.

7.2.2.3. Governance

DoD data governance provides the principles, policies, processes, frameworks, tools, metrics, and oversight required to effectively manage data at all levels, from creation to disposition.

7.2.2.4. Talent and Culture

DoD workforce (Service Members, Civilians, and Contractors at every echelon) will be increasingly empowered to work with data, make data-informed decisions, create evidence-based policies, and implement effectual processes. data requirements within and external to the objective system needs to be consistent and reliable.

7.3. Comparative Industry Training and Education Domain Analysis and Structure

The IT solutions that enable ATIS will be a mix of modern COTS and modernized GOTS in order to incorporate industry best practice business process and user experience outcomes. ATIS is a Defense Business System (DBS) within the greater DoD Business Enterprise Architecture (BEA) and is nested in the Business Mission Area (BMA). High-level ATIS architecture (BEA end-to-end system alignment) is structured to mirror the familiar TRADOC ADDIE model (analysis, design, development, implementation, and evaluation). See Figure 2: Army Learning Environment End-to-End Business Process for example. Utilizing best in industry COTS, modernized GOTS, cloud services, AI, and BEA structure enables ATIS to deliver an Army wide enterprise Training and Education capability that is responsive to change.

8. Conduct Business Process Reengineering (BPR) and Identify Changes

8.1. BPR Overview

According to the Army Regulations (AR) 5-1, Management of Army Business Operations: "BPR is a logical methodology for assessing process weaknesses, identifying capability gaps, and implementing innovation and optimization opportunities to achieve breakthrough improvements in operational performance." BPR seeks radical change, enables new process outcomes, and focuses on end-to-end business processes rather than functional silos.

8.2. BPR Methodology and Technical Approach

The Army Business Strategy (ABS) 2017- 2021 dictates the need for an improved Army-wide BPR approach aimed at delivering readiness at best value with the highest possible product and service quality, on-time, every time and anywhere. See Figure 15.

Figure 14: BPR Methodology for ATIS

9. Document Process Performance Measures and Information Assets

9.1. Army Implementation Guidance

The Army Implementation Guidance for the DoDI 5000.75 directs programs to "ensure the BPR effort clearly articulates the improvements resulting from enhanced processes or redesigned processes, with measured outcomes as contained in measures of effectiveness (MoE) and measures of performance (MoP). The MoEs and MoPs also form the basis for measuring the performance of the capability over time."

9.2. Technical Performance Measures

The ATIS IT Functional Requirements matrix includes Technical Performance Measures (TPMs) applied to each MOP that establish business process performance measures that indicate when the process is being executed as intended. ATIS OV-6c (Business Process Modeling Notations) have information assets identified on sequence lines to describe how information is used, moved and transformed throughout the process.

9.3. Automation Levels

During the BPR and requirement identification sessions, SMEs provided their analysis of the MoEs in both "AsIs" and "ToBe" automation levels (Included in the ATIS ITFR), as detailed in Section 7 above.

10. Develop DOTMLPF-P Actions and Initial Capability Implementation Plan (CIP)

10.1. Initial Capability Implementation Plan (CIP)

The Product Manager (PdM) provided a Capability Implementation Plan (CIP) as an artifact for Authority to Proceed 3. PdM also provided a ROM and costing (Table 18 above) as part of acquisition plan of action and milestones. An updated acquisition strategy is being developed, and once approved, the ATIS CIP will continually evolve to keep pace with any changes to the acquisition strategy. Objective ATIS DOTMLPF-P implementation plan will: (a) provide a ROM cost estimate for non-materiel changes required; and (b) prioritize and sequence each DOTMLPF-P action over time.

APPENDIX A: REFERENCES

Number	Title	Date
ALARACT	All Army Activities (ALARACT) 178/2015	23-Nov-15
A-OBT Strategy	Army Business Management Plan (ABMP) 2021- 2025	11-May-21
Army Plan	Army Data Plan	18-Nov-19
AR 350-1	Army Training and Leader Development	10-Dec-17
AR 350-9	Overseas Deployment Training (ODT)	8-Nov-04
AR 350-28	Army Exercises	9-Dec-97
AR 5-1	Management of Army Business Operations	12-Nov-15
CAC-T Vision	Army Training Vision 2030, v5 (DRAFT)	9-Mar-22
FM 7-0	Field Manual 7-0, Training	14-Jun-21
Memorandum	Army Implementation Guidance for the DoDI 5000.75	26-Jan-18
TR 350-70	Army Learning Policy and Systems	10-Jul-17
TR PAM 525-8-2	The U.S. Army Learning Concept for 2035 (DRAFT)	2022
TRADOC CBA	ATIS Capabilities Based Analysis (CBA)	30-Jan-08
TRADOC Pam	Army Training Concept 2035 (DRAFT)	2022
TRADOC Study	TRADOC Institutional Education and Training Reform Study	2012

APPENDIX B: RELEVANT LAWS, REGULATIONS, AND POLICIES

Initial list of potentially relevant Law, Regulation, and Policy (LRP) that may impact delivery of the objective ATIS. These LRPs help shape the problem scope and are intended to identify any potential direct or indirect impacts resulting from objective ATIS capability and materiel development activities. Further analysis is needed to determine the full scope of any potential impacts to this list.

Number	Title of Law, Regulation, and Policy	Date
ADRP 1-03	The Army Universal Task List	2-Oct-15
AR 11-33	Army Lessons Learned Program (ALLP)	14-Jul-17
AR 25-1	Army Information Technology	25-Jun-13
AR 25-400-2	The Army Records Information Management System (ARIMS)	2-Oct-07
AR 350-1	Army Training and Leader Development	10-Dec-17
AR 350-10	Management of Army Individual Training Requirements and Resources	3-Sep-09
AR 350-19	The Army Sustainable Range Program	30-Aug-05
AR 350-28	Army Exercises	9-Dec-97
AR 350-38	Policies and Management for TADSS	2-Feb-18
AR 350-52	Army Training Support System	17-Jan-14
AR 350-9	Overseas Deployment Training (ODT)	8-Nov-04
AR 385-10	The Army Safety Program	24-Feb-17
AR 385-63	Range Safety	24-Feb-17
Army Directive 2016-38	(Migration of Army System and Applications to Approved Hosting Environments and Consolidation of Data Centers)	9-Dec-16
DA PAM 25-2-14	Risk Management Framework for Army Information Technology	8-Apr-19
DA PAM 350-38	Standards in Training Commission	30-Sep-21
DA PAM 350-58	Army Leader Development Program	8-Mar-13
DA PAM 385-16	System Safety Management Guide	13-Aug-13
DA PAM 385-63	Range Safety	16-Apr-14
DA PAM 415-28	Guide to Real Property Category Codes	10-Jul-13
DoD Plan	National Defense Business Operations Plan FY18 – FY22	9-Apr-18
DoD Strategy	Unleashing Data to Advance the National Defense Strategy	30-Sep-20
DoDI 5000.75	Business-System-Requirements-and-Acquisitions"(Ch2)	24-Jan-20
DoDI 5000.87	Operation of the Software Acquisition Pathway	2-Oct-20
DoDI 6025.18	DoDI 6025.18, Health insurance portability and accountability act (HIPAA) privacy rule compliance in DoD health care programs	13-Mar-19
DoDI 8510.01	Risk Management Framework for DoD Information Technology	24-May-16
DoDM 8260.03, Vol 1	Global Force Management Data Initiative Implementation: Unique Identification for Enterprise Force Structure Data	1-Jul-22
DoDM 8260.03, Vol 2	Global Force Management Data Initiative (GFM DI) Implementation: The Organizational and Force Structure Construct (OFSC)	14-Jun-11
FM 6-22	Army Leadership	30-Jun-15
FM 7-0	Training	14-Jun-21
Guide	“Business Capability Acquisition Cycle Methods and Conventions Guide” (A-OBT Architecture Guidance)	30-Jul-21
Guide	“Army Business Enterprise Architecture (ABEA) Methods and Conventions Guide” (A-OBT Architecture Guidance)	25-Nov-19

Number	Title of Law, Regulation, and Policy	Date
Memorandum	DoDI 5000.75Army Implementation Guidance"	26-Jan-18
Memorandum	DoD Office, Chief Information Office/G-6 Memorandum Subject: Guidance for Migration to, and Use of, Commercial Cloud Service Providers (CSPs)	23-Jul-15
Memorandum	Memorandum, Deputy Chief Management Officer, Subject: Army Training Information System (ATIS) Problem Statement (PS) Decision Memorandum	1 Jul 14
Memorandum	Memorandum, Office of Assistance Secretary of the Army, Acquisition, Logistics, and Technology, Subject: ATIS Materiel Development Decision, Acquisition Decision Memorandum	29 Jul 14
Memorandum	Memorandum, HQ TRADOC, Subject ATIS Analysis of Alternatives Final Report Release Authorization	26 Jul 16
Memorandum	Memorandum, Office of Under Secretary of the Army, Subject: Approval of Requirements for Army Training Information System in support of Functional Requirements Authority to Proceed Decision	9 Mar 17
Memorandum	Memorandum, Office of Assistant Secretary of the Army, Acquisition, Logistics, and Technology, Subject: ATIS Acquisition Decision Memorandum (FR-ATP)	21 Mar 17
Memorandum	Memorandum, OBT, Subject: ATIS Functional Requirements Decision Paper	16 Jan 20
Memorandum	Memorandum Program Executive Officer, Enterprise Information Systems, Subject: Acquisition Decision Memorandum (ADM) for the ATIS to Enter the Acquisition, Testing, and Deployment (AT&D) Phase	20 May 20
NIST SP 800-122	Guide to Protecting the Confidentiality of Personally Identifiable Information (PII)	Apr-10
TP 350-70-1	Training Development in Support of the Operational Training Domain	12-Feb-19
TP 350-70-12	The Army Distributed Learning (DL) Program	3-May-13
TP 350-70-13	System Training Integration	27-Oct-14
TP 350-70-14	Training and Education Development in Support of the Institutional Domain	15-Apr-21
TP 350-70-3	Staff and Faculty Development	4-Oct-18
TP 350-70-7	Army Educational Process	4-Oct-18
TP 350-70-9	Budgeting and Resourcing"	12-Oct-12
TP 525-8-2	The U.S. Army Learning Concept for Training and Education 2020-2040	13-Apr-17
TR 11-21	TRADOC Implementation of the Army Quality Assurance Program	19-Mar-14
TR 350-6	Enlisted Initial Entry Training Policies and Administration	TBD
TR 350-18	The Army School System (TASS)	1-May-18
TR 350-28	United States Army Reserve (USAR) Support to the Generating Force	30-Nov-15
TR 350-40	Army Training Help Desk Federation	9-Jan-14
TR 350-70	Army Learning Policy and Systems	10-Jul-17
TR 350-71	Enterprise Classroom Program	22-Dec-20
TR 600-21	TRADOC Reg 600-21, "Faculty Development and Recognition Program"	2-May-18

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APPENDIX C: REQUIREMENTS TRACEABILITY FLOW

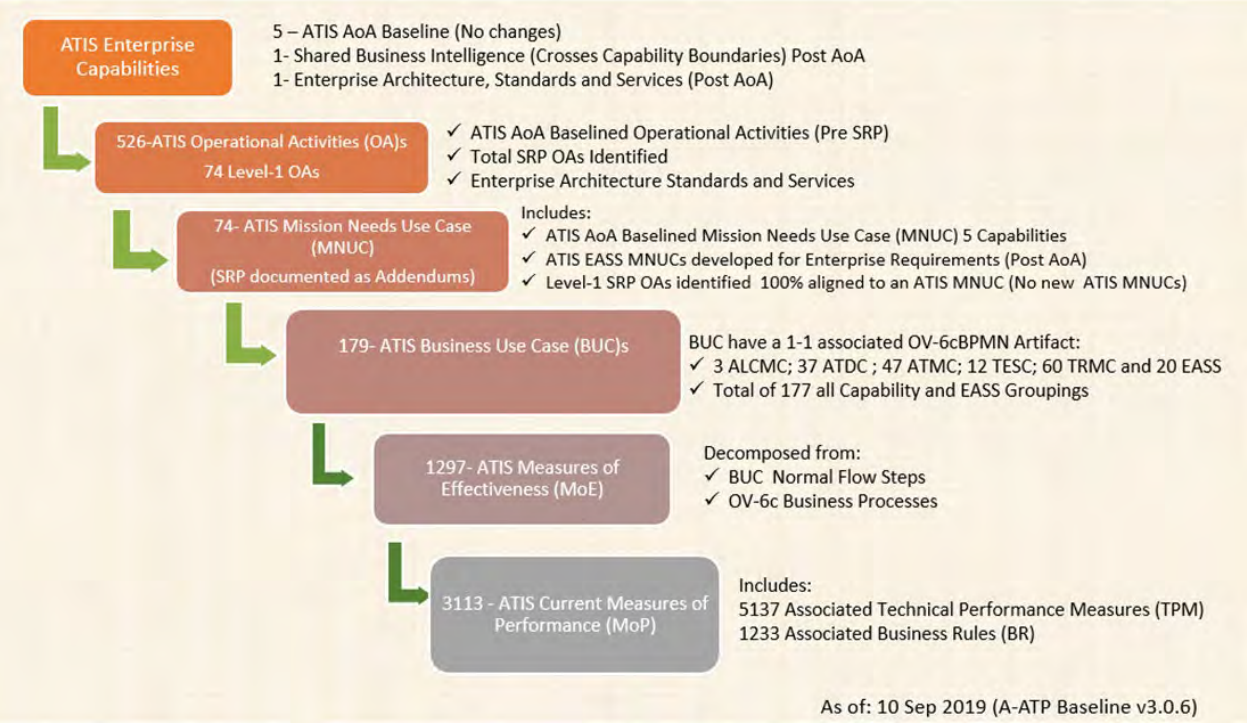


Figure 15: Requirements Traceability Flow

Using available documents Mission Needs Use Case (MNUC)s were developed for each Level-1 Operational Tasks including all of the 'child' activities identified on the OV-5a.

The MNUC document included a description of the MNUC Activity, interfaces, assumptions and alignments to known ATIA-M requirement documents if applicable.

MNUCS were decomposed into one or more Business Use Cases (BUCs) describing the business process and the steps to achieve the BUC goal(s).

BUC Steps were used to create an BPMN OV-6C business process diagram showing trigger, end-points, actors, stakeholders and sequences that were used to identify resource (data) exchanges.

After the SMEs edited, validated and approved the MNUC, BUC and OV-6c documents an Analyst from the development community, using MS PowerPoint Slides as the vehicle for gathering data, walked them through decomposing each OV-6C process to one or more Measures of Effectiveness (MoE) (the goal was to get to the lowest level business process).

Once the MoE was defined, SMEs were asked to rate the current state "As-Is" for their supporting system as existing manual, existing automated, existing partially automated, or New. The next step was to rate the "To-Be" ATIS support state using the same criteria. Once this was completed, SMEs were asked to identify the Measures of Performance (MoP) that best described the future "To-Be" system function desired. Next SMEs were asked if they could identify any Technical Performance

Measures (TPM) that would allow the developer to measure or quantify the MoP for acceptance or progress.

Once the MNUC, OV-6c, MoE, MoP and TPMs were accepted by the SMEs and validated by the analyst, the data was transferred to the ATIS IT Functional Requirements document (MS Excel Matrix).

APPENDIX D: BUSINESS CAPABILITY ACQUISITION CYCLE (BCAC) ARCHITECTURE

All architecture views and artifacts located in various location by purpose and applicability:

- **Risk Management Framework (RMF) Boundary Architecture:** Developed by PdM ATIS and maintained on the PEO EIS Development SharePoint at URL: https://peoeis.kc.army.mil/atis/perspecta/SitePages/Home.aspx.

- **Authoritative Data Sources and data files:** Developed by system owners and submitted through TPO ATIS to their Domain Portfolio Manager (PfM) for uploading into the Enterprise Data Services Catalog (EDSC). EDSC leverages a tool called Collibra at URL: https://edsc.ekr.cprobe.army.mil/edsc/dashboard for approved documents and files. Initial EDSC submissions are uploaded to the A-OBT SharePoint for staffing and analysis at URL: A-OBT SharePoint.

- **Business Capability Acquisition Cycle (BCAC):** Developed and maintained on the Army Office of Business Transformation (A-OBT) Enterprise Knowledge Repository (EKR) using a tool called ARIS (Connector or Model Design) at URL: https://aepportal.pica.army.mil/.

- **ATIS Program of Record (PoR) Department of Defense Architecture Framework (DoDAF) Architecture:** Non-BCAC artifacts developed and maintained on the ATIS Confluence Knowledgebase at URL: https://collabconf.atsc.army.mil/.

EDSC artifacts and files include:

- ADS Quad Chart (Nomination and Negative Responses) – (PfM Format Provided)
- System Access Policy (System Defined, Graphic or Document)
- Data Accuracy (PfM MS Excel Format)
- Data Dictionary (PfM MS Excel Format)
- ISA Document Uploaded to EDSC system file repository
- System Data Exchange (SDE) Matrix (PfM MS Excel Format)
- System Interface Design (SV-1)

BCAC artifacts are itemized below with descriptions included at the end of this document. A "**f**" indicates an EKR 'federated' artifact. A '*****' indicates an annual Investment Decision Memorandum (IDM) mandatory review artifact. Responsible agent is identified within parentheses.

- CV-1 Vision – (TPO-ATIS)
- CV-2 Capability Taxonomy (TPO-ATIS)
- CV3- Capability Phasing (TPO-ATIS)
- CV-6.f – ABEA Activity Mapping (TPO-ATIS)
- E2E* – End-to-End Process Object
- OV-2.f – Role Relationships (TPO-ATIS)

- OV-3a* – AOBT Fit-For-Purpose Metadata Matrix
- OV-5a* – Operational Activity Decomposition Tree (TPO-ATIS)
- OV-5b.f – High Level Capability Process Map Diagram (PdM ATIS)
- OV-6a – Business Rules / LRP (TPO-PdM ATIS)
- OV-6c – Future State Process Model (TPO ATIS)
- DIV-1.f* – Conceptual Data Model (TPO ATIS)
- DIV-1 to OV3a* Information Asset Matrix (IAM) Alignment (TPO ATIS)
- DIV-2 – Logical Data Model (TPO-PdM ATIS)
- SV-1 – System Interface Diagram (TPO-PdM ATIS)
- SV-3.f – Future State System-to-System Interaction Matrix (TPO-PdM ATIS)
- SV-4 – High Level System Functions (PdM ATIS)
- SV-5b.f – System to OA Mapping (PdM ATIS)
- SV-6 – System Interactions (PdM ATIS)
- StdV-1 – Standards Profile (PdM ATIS)

Available ATIS PoR Architecture DoDAF artifacts include.

- OV-1 – High Level Operational Concept Graphic
- OV-1 – Operational Environment (OE)
- OV-1 – Solutions Umbrella Graphic
- CV3- Capability Phasing PPTX (TPO-ATIS)
- DIV-2 – Logical Data Model (TPO ATIS)
- SV-8 – System Evolution Diagram (PdM ATIS)

BCAC Architecture artifact descriptions.

(U) **CV-1 Vision** [1]: The CV-1 is a high-level explanation of the result of implementing the desired Business Capability. The CV-1 showcases an understanding and description of the problem, as well as its root causes. It will also highlight what the high-level outcomes will be should the Business Capability be implemented. The information required for the CV-1 can be derived from the Problem Verification Form (PVF) and Capability Requirements Document (CRD), so there is no requirement to create a CV-1 product in a model format.

(U) **CV-2 Capability Taxonomy** [1]: The Capability Taxonomy contains the Business Capability that is the subject of the BCAC process, as well as a decomposition of its Sub-Capabilities. The CV-2 is the focal point of the Phase 1 architecture products, as the majority of the other products in Phase 1 use information from it to categorize the information. The CV-2 is split between the sub-capabilities already supporting the Business Capability, or "As-Is" Sub-Capabilities, and the Sub-Capabilities being modernized or extended to support the Business Capability, or "To-Be" Sub-Capabilities.

(U) **CV-3 Capability Phasing** [1]: The CV-3 depicts the phases in which the Sub-Capabilities of the Business Capability are implemented. The phases are incremental in nature, demonstrate the steps that must be taken to reach the full operating capability (FOC), and demonstrate the criteria to pass from one phase into the next.

(U) **CV-6.f ABEA Activity Mapping** [1]: The ABEA Activity Mapping (CV-6.f) contains the grouping of ABEA Operational Activities by the Capabilities presented in the CV-2. The set of Operational Activities comprehensively describes the operation of the Business Capability, while the mappings show the footprint of the Business Capability within the architecture. The CV-6.f is a federated product, with the Operational Activities being taken from the ABEA OV-5a.

(U) **DIV-1.f High Level Information Assets** [1]: The High-Level Data Concepts (DIV-1.f) is a model showing the hierarchal organization of the major data concepts of the enterprise related to the Business Capability. These data concepts are consumed, internal to, or produced by the Business Capability. The DIV-1.f is a federated product, with the data concepts coming from the ABEA DIV-1.

(U) **DIV-1 to OV3a Information Asset Matrix (IAM)** [2]: The Information Asset Matrix (IAM) describes what Enterprise Information Classes are carried within each Information Exchange. The ABEA IAM contains the complete set of Information Exchanges as taken from Domain input and various process models. These Information Exchanges are mapped to Information Classes from the ABEA DIV-1, to show when the Information Class is represented in the Information Exchange.

(U) **E2E Process Object** [1]: A Process is a single- or cross-Domain collection of sequenced Activities which produce and/or consume information in order to satisfy a specific business need. The End-to-End Processes (E2Es) are members of the defined Army E2E set that is consistent with formal Army guidance (AR 5-1). Other business processes may be at a lower level of detail than the E2Es or documented as a product of solution design or Business Process Reengineering (BPR) efforts. The E2E Process Object contains the title and description of the Process and may be associated with a model of the Process itself.

(U) **OV-2a Operational Role Catalog** [2]: The Role Catalog (OV-2a) is the master source of Operational Roles. Operational Roles are often derived from MOSs and describe the skills or specialization of a Process Performer.

(U) **OV-2.f Role Relationships** [1]: The OV-2.f shows the Roles that are responsible for carrying out the Operational Activities supported by the Business Capability. The Roles are organized by Capabilities presented in the CV-2. The OV-2.f is a federated product, with the Roles being populated from the ABEA OV-2a.

(U) **OV-3a Information Exchange Catalog** [2]: The Information Exchange Catalog (OV-3a) is the master source for Information Exchanges, which are useful aggregations of information such as forms, documents or messages that are communicated or transferred while a Process is performed.

(U) **OV-5a Operational Activity Catalog** [2]: The Operational Activity Catalog (OV-5a) is the master source for ABEA Operational Activities which serve as individual process steps that Organizations and Roles perform within the BMA Domains. The Operational Activity Catalog shows activities depicted in a hierarchal structure and is typically used to provide the Domains' complete set of OAs.

(U) **OV-5b.f High Level Capability Process Map Diagram** [1]: The Capability Process Map Diagram (CPMD) represents the footprint of the Business Capability within the ABEA E2E environment. The CPMD resembles a Business Process Modeling Notation (BPMN) process model in overall appearance in that it includes swim lanes, process steps, information flows, start/end/intermediate events, and branching/converging gateways. The CPMD is federated, with the Roles, E2E Process Steps, OAs, and Information Exchanges coming from authoritative products in the ABEA.

(U) **OV-6a Business Rules/Laws, Regulations, and Policy (LRPs)** [1]: The Business Rules/LRPs (OV-6a) is a complete list of the Laws, Regulations, and Policies (LRPs) that guide, constrain, or govern any aspect of the Business Capability. The information presented on the OV-6a is not limited to a defined set of information concepts, but rather any information concept that is influenced by an LRP.

(U) **OV-6c Future State (Detailed) Process Model** [1]: The Future State Process Model (OV-6c) is a detailed process model, based on BPMN conventions. The OV-6c is similar to the OV-5b.f in appearance, but has noteworthy differences. First, its scope is based around the Operational Activity level, the same level presented in the CV-6.f, making this model a more granular representation of the business processes than the CPMD. Second, the OV-6c is not a federated product, meaning that the information presented is not required to come from an authoritative source, though when available, authoritative ABEA reference objects are used.

(U) **SV-1 System Interaction Model** [2]: The System Interaction Model (SV-1) depicts the information flows or transfers between Systems. A Resource Flow, as depicted in the SV-1, is an indicator that resources pass between one System and the other. This can be expanded into further detail in an SV-2 Systems Resource Flow Description. Interactions are only possible between Systems and Services. System Resource Flows provide a specification for how the operational Resource Flows Exchanges specified in Needlines (in the OV-2 Operational Resource Flow Description model) are realized with Systems. A single Needline shown in the OV-2 Operational Resource Flow Description model may translate into multiple System Resource Flows.

(U) **SV-3.f System to System Interaction Matrix** [1]: The SV-3.f shows the interactions between the Business Capability and its sub-capabilities defined in the CV-2, and any Systems it may need to send data to, or receive data from. In this product, the Business Capability taxonomy is used to represent the “Solution System” required by DoDAF in the traditional SV-3.

(U) **SV-4 High Level ITFRs (System Functions)** [1]: The High Level ITFRs (System Functions) (SV-4) is a model showing the hierarchal organization of the ITFRs related to the Business Capability. The ITFRs are major actions performed by the Business Capability in order to fulfil its operational requirements. The information on the model is presented at a level of detail to inform potential business system solutions, without overly constraining solution selection.

(U) **SV-6 System Interactions** [1]: The System Interactions (SV-6) is a matrix highlighting the exchange of information between business systems. In the scope of BCAC, the SV-6 shows the

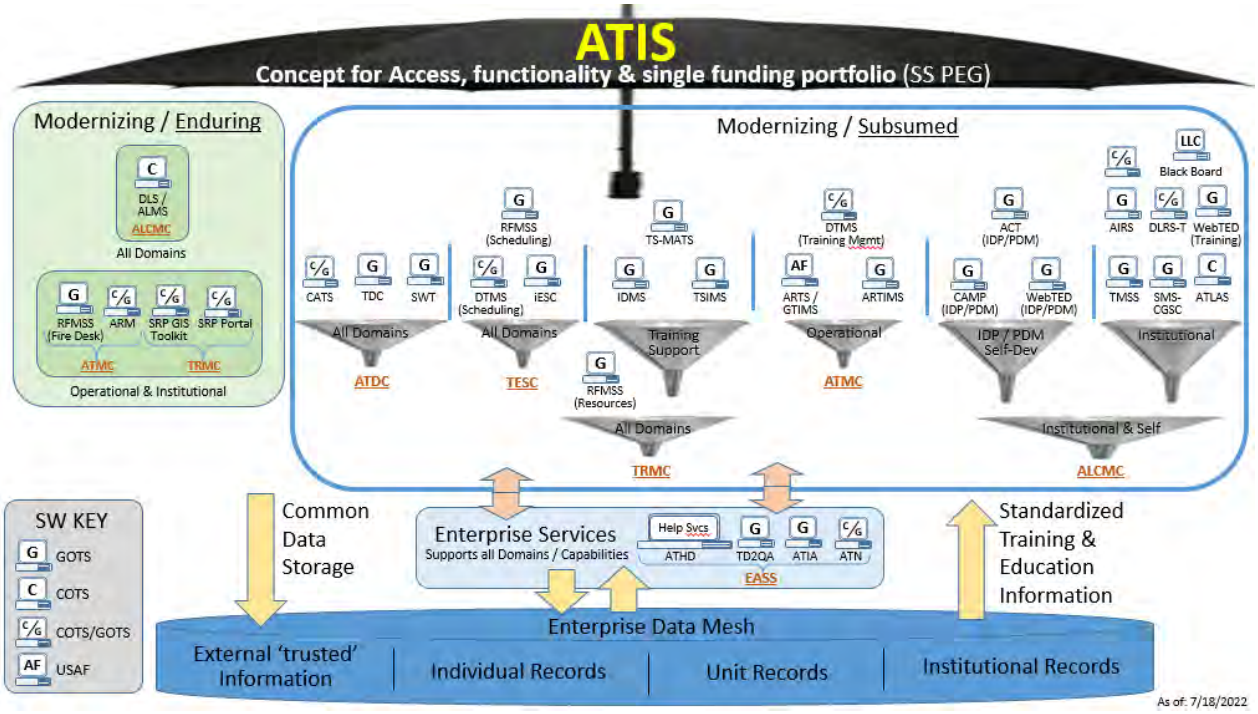
exchange of information classes between the solution system, and any business systems with which it may interact. The SV-6 is similar to the SV-3, but provides a more detailed scope for the information.

(U) **StdV-1 Standards Profile**[1]: The Technical Standards (StdV-1) is a matrix model showing the various Technical Standards that constrain and guide aspects of the solution system. The StdV-1 in the BCAC process connects the list of Technical Standards which are related to the Solution System and aligns them to the individual elements of the BCAC architecture (e.g., sub-capabilities, ITFRs). The format of the model is similar to the OV-6a, with a focus on the technical portion of the architecture.

Endnotes:
[1] BCAC Methods and Conventions
[2] ABEA Methods and Conventions

APPENDIX E: Objective ATIS Functionality & Constraints

ATIS access, functionality and single funding portfolio (SS PEG). The figure below depicts logical consolidation of functionality over time based on legacy system owner and SME identified requirements. Systems labeled “Modernizing/Enduring” have unique functionality that can be retained with modernization to comply with hosting, server consolidation, cloud services, data strategy and PII/PHI directives. “Modernizing / Subsumed” group of systems are projected to be sunset upon transition to an objective COTS/GOTS/Enterprise solution that meets the end-state functional capabilities. Common Enterprise capabilities support and provide services to all objective capabilities. The ATIS Enterprise data warehouse houses training and education information to achieve VAULTIS goals of Visible, Accessible, Understandable, Linked, Trustworthy, Interoperable and Secure.



(Same as figure 3) ATIS Access, functionality and single funding portfolio (SS PEG)

Potential legacy systems that may be subsumed “AsIs” as “internal” ATIS interfaces (aka, Lift & Shift). These will be housed as “internal” interfaces under the ATIS umbrella to include care and feeding except where marked with an asterisk. The assumption is that they fall under/integrated with ATIS for funding and governance. Same pot of money and same decision makers.

These are assumptions, caveats and 2nd/3rd order effects for consideration:

ACT – Must be modified to accommodate WEB TED and CAMP IDP & PDM functionality. ACT sponsorship portion is retained outside of ATIS (most likely by HRM). Data interfaces will be required with CAMP system modules that remain outside of ATIS.

AIRS – Is now hosted by ASIMS—as a means to comply with the Data Center/Cloud Consolidation TASKORD—until ATIS comes online. After ATIS subsumes AIRS—ASIMS will require an interface.

ALMS – will be enduring fully, underneath the ATIS umbrella.

ARM – stay intact and enduring (as COTS/GOTS). Need to push products/artifacts to ATIS database.

ARTS/GTIMS. The Army instance is provided by the USAF without charge. All configuration/change management is thru the USAF CM process. Need a data transfer tool to incorporate data elements into ATIS (e.g., Mulesoft, SIS).

CAMP* – is enduring as is fully and will need an interface for IDP from ACT "within" ATIS (see ACT above).

DTMS – Scheduling functions go to ATIS TESC capability area. Training management functions go to ATIS ATMC capability area. The **ATN** functions will be subsumed by ATIS EASS capability area for worldwide information distribution. **CATS** functions go to TDC.

ECDC – This functionality will be provided by COTS solution.

Help Services – will subsume primary responsibility for all capability areas and systems under ATIS.

RFMSS – stay intact as a system, but the database must be fully integrated into ATIS.

SRP GIS TK – stay intact and enduring (as COTS/GOTS). Need to push products/artifacts to ATIS database.

SRPP – stay intact as a system with exception of the enterprise data warehouse (EDW) being integrated into ATIS.

TDC– will be enduring fully, underneath the ATIS umbrella.

DTMS-CATS and **SWT** will be subsumed by TDC, but the database must be fully integrated into ATIS.

TS-MATS – modify to subsume **IDMS** and **TSIMS**, but the database must be fully integrated into ATIS.

WEB TED – AMC training functionality will be subsumed into ATIS ATMC capability area. The IDP & PDM for both acquisition and non-acquisition will be subsumed by ATIS version ACT.

Unknown 1 – SiPRNET instances for ARTIMS and LLC. ATIS currently only has requirements for IL5 and below information.

Unknown 2 – Commercial instances of LLC.

APPENDIX F: FUNCTIONAL REQUIREMENT AUTOMATION GAPS (DOCUMENTED IN THE ANALYSIS OF ALTERNATIVES)

The roll up information in this appendix is extracted from "ATIS CRD Appendix F-AoA-GAPs" document located in the ATIS CRD Working Group Teams channel files section. The link to the channel is: https://dod.teams.microsoft.us/l/channel/19%3adod%3aafaf6bbbcf834410ad5c43e16d1f677c%40thread.tacv2/General?groupId=111cc7a9-b3e4-4bc7-bccc-39c45c715afc&tenantId=fae6d70f-954b-4811-92b6-0530d6f84c43. Note that you may need to request access to the MS Teams area. The join code is: c8nk3v2. If these automated methods do not enable access—send an email to usarmy.jble.CAC.mbx.atis-por@army.mil and an TPO ATIS representative will assist further.

After the requirement measures team approved the MNUC, Normal Flow Steps and the Business Modeling artifacts, they were asked to decompose business processes to the lowest level called Measures of Effectiveness (MoE). Once the team identified the MoE and Measures of Performance (MoP) the team was asked to assess the “As Is” and “To Be” automation by comparing the two using the following criteria:

- Automated = all requirements are in a system
- Automated (Partial) = most requirements in a system or location
- New = Requirements not available now
- Manual = Swivel Chair now, can it be automated

Table 19: Functional Requirement Automation Categories

Levels	As-Is	To-Be	Rationale
1	Automated	Automated	Sustain Current Functionality
2	Partially Automated	Automated	Enhanced Current Functionality
3	N/A	Automated	New Functionality
4	Manual	Automated	Improving Functionality
5	Manual	Manual	N/A

Levels 1 and 5 are not considered ‘gaps’. Levels 2 through 4 are varying levels of gaps as noted in rationale above. The number of gaps are noted below.

- **There are 212 MoEs aligned to level 2 gaps**.

(2= Existing (As Is) Partial Automated – Objective (To Be) Fully Automated), Page G-2 through G-18

- **There are 61 MoEs aligned to level 3 gaps.**

(3= New Requirement (As Is) – Objective (To Be) Fully Automated in Future), Page G-19 through G-23

- **There are 279 MoEs aligned to level 4 gaps.**

(4= Existing (As Is) Manual – Objective (To Be) Fully Automated in Future), Page G-24 through G-48

APPENDIX G: POTENTIAL ATIS SYSTEM INTERFACES

ATIS expects to interface with at least 81 external systems. Some interfaces are bi-directional. Approximately 54 interfaces will have inbound data to provide ATIS with reference or training/personnel records. ATIS will have about 48 outbound data transfers to provide authoritative data to external systems. The number of outbound data transfers will grow throughout ATIS development and sustainment.

ATIS will share its authoritative data through a general-purpose API (application programming interface) to maximize data consistency, improve documentation, minimize costs, and minimize time to establish system connections. The establishment of common interfaces and publication of technical documentation allows technical work in parallel with governance processes. The common general-purpose interface provides consistent ATIS data to multiple external systems, reports, and the user interface. External systems will have access to all data permitted by their memorandum of agreement (MOA) and interconnection security agreement (ISA) reducing the amount of rework and revisions. All authoritative ATIS data in a final or approved status should be available via the common general-purpose API upon completion of an MOA and ISA. (ATIS MNUC: EASS-6000)

See Table 20 for data provided by ATIS to external systems and Table 21 for data collected by ATIS from external systems.

External systems provide authoritative data to ATIS for reference or input to training/personnel records. In these cases, the external systems provide the services and APIs. The ATIS backend architecture will support a variety of interface technologies for consuming data from external systems.

2528 **Table 20: Data Provided by ATIS to External Systems**

Information ATIS provides to external systems	External System receiving data from ATIS	Current System providing data
AER Form 1059 PDF with signatures	IPERMS - interactive Personnel Electronic Records Management System (iPERMS)	
Army Physical Fitness Test (APFT) / Army Combat Fitness Test (ACFT)	RLAS - Regional Level Applications Software (RLAS)	DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications	ITRS - Individual Training and Requirements System	DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications, Individual Education Data	IPPS-A - Integrated Personnel and Payroll System - Army	DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications	RCMS-G - Reserve Component Manpower System - Guard	ACT DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications	RCMS-R - Reserve Component Manpower System - Reserve	DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications	SMS - Strategic Management System	DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications, and individual and collective task assessments	SPHERE - Soldier Performance, Health, and Readiness	DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications, and individual task assessments	SOTA - Statistical Outcomes Trajectory Assessment (SOTA) Server	DTMS
APFT/ACFT, Height/Weight, Weapon Qualifications, individual task assessments	PDE - Person-Event Data Environment	DTMS
APFT/ACFT, individual task assessments	RMT - Readiness Management Tool	DTMS
Classroom Configuration and Capabilities	ECP - Enterprise Classroom Program	
Course catalog	Army E-Learning - Army E-Learning	ALMS
Course completions and task assessments	MITS - Military Intel Training Studies	
Course enrollments and completions	State NGB DB	
Education transcripts and current course enrollments	ArmyIgnitED - formerly GoArmyEd	ACT
Event schedule and airspace information	SAMS - Special Use Airspace Management	RFMSS

Information ATIS provides to external systems	External System receiving data from ATIS	Current System providing data
Explosive ordinance information	EOD SIM - Explosive Ordinance Simulation	DTMS
Warfighter TSP, Soldier profile, unit	STE - Synthetic Training Environment	TDC CAR DTMS
Individual and collective tasks assessments, APFT/ACFT, Height/Weight, Weapons Qualifications	AAG (A2Tv3) - Army Analytical Group - Army Analytical Tool (Version 3)	DTMS
Individual task assessments	DMHRSi - Defense Medical Human Resources System-Internet	DTMS
Individual task assessments, Soldier profile data	ArmyFit - Army Fitness Platform	ACT DTMS
Lessons Learned	JLLS-Next - Joint Lessons Learned	
Materiel Requirements	AESIP - Army Enterprise Systems Integration Program	ALMS
Military and Civilian Transcript	JST - Joint Service Transcript	
Notification and Alerts	DISA Enterprise Email (DEE) - DoD Enterprise Email	
POIs	ArmyU Course Catalog - Army University System	TDC
POIs	TRMIS - Training Resource Model Information System (TRMIS)	TDC ATIA
Profile and units	ITAPdB - Integrated Total Army Personnel Database (HRC)/IPPS-A	ACT DTMS
Range and training area scheduling, scheduling approvals	CSE - USAF Center Scheduling Enterprise (CSE)	RFMSS
Ranges	RPLANS - Real Property Planning and Analysis System	SRPP
Resident Course Travel Data	DTS - Defense Travel System	
Student Course Completions, Course Catalog	ALU - Army Logistics University	

Information ATIS provides to external systems	External System receiving data from ATIS	Current System providing data
Student Course Completions, Course Catalog	DAU - Defense Acquisition University (System to be identified)	
Student Course Completions, Student enrollment requests, Course schedule requests	ATRRS - Army Training Requirements and Resources System	ACT ARTS-GTIMS ATIA-SIS DTMS ALMS iESC LLC ARRM
Training completions	DCPDS - Defense Civilian Personnel Data System	WebTed DTMS
Training Completions	ASMIS 2.0	None
Training Event	AST - Army Synchronization Tool	ARTIMS DTMS
Training Events	GFEBS - General Fund Enterprise Business	DTMS
Training Events and Units	JTIMS - Joint Training Information Management System (JTIMS)	ARTIMS
Unit Readiness	Azimuth Check (formerly GAT) - Azimuth Check (formally Global Assessment Tool)	DTMS
Unit Readiness	Army Vantage - Army Vantage	DTMS RFMSS
Unit Readiness Reporting	MARRS - Mission Analysis Readiness Resource Synchronization (MARRS)	
Unit Readiness Reporting	EMDS - Enterprise Management Decision Support	TSIMS
Unit Readiness Reporting, individual and collective task assessments	DRRS-A - Defense Readiness Reporting Service - Army /AOS/GFIM	DTMS
Unit Readiness Reporting, individual and collective task assessments	DRRS-S - Defense Readiness Reporting System-Strategic	DTMS

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Table 21: Data Collected by ATIS from External Systems

Information ATIS Needs from other authoritative Systems	External System providing data to ATIS	Current System receiving data
Ammunition DODIC and other properties	TAMIS - Total Ammunition Management Information System (TAMIS)	RFMSS ARRM DTMS
Army Acquisition Workforce Personnel Data	CAMP/DCPDS	CAMP
AUTL / UJTL Listing	JDEIS - Joint Doctrine, Education, and Training Electronic Information System (JDEIS)	
Civilian Certifications	COOL - Credentialing Opportunities On-Line	ACT
Civilian Profile	HQACPERS - Headquarters Army Civilian Personnel System	ACT
Classroom Configuration and Capabilities	ECP - Enterprise Classroom Program	
College Credit Recommendation (via Army University)	ACE - American Council on Education	
Course Catalog	ACES - Army Continuing Education System	
Course Catalog	Army E-Learning - Army E-Learning	ALMS
Course Catalog, Course Schedule, Student Enrollments, Proponent Codes, School Codes, SMDR Codes	ATRRS - Army Training Requirements and Resources System	ACT ARTS-GTIMS ATIA-SIS DTMS ALMS iESC LLC ARRM
Course completions and individual task assessments	RECMOD - Reception Module	ATIA-SIS DTMS
Course enrollments and completions	State NGB DB	
Digital training materials and DoD/Army doctrine	APD - Army Publishing Directorate	

Information ATIS Needs from other authoritative Systems	External System providing data to ATIS	Current System receiving data
Education transcripts and current course enrollments	ArmyIgnitED - formerly GoArmyEd	ACT
Equipment National Stock Number (NSN) and Inventory Costs	LIW - Logistics Information Warehouse	TSMATS
Event schedule and airspace information	SAMS - Special Use Airspace Management	RFMSS
Facilities, Range, and Training Areas	ASIP - Army Stationing and Installation Plan	RFMSS ARRM
Hierarchy data for Army structure	AOS - Army Organization Server	
Individual Education Data, Soldier Career data	IPPS-A - Integrated Personnel and Payroll System - Army	DTMS
Individual task assessments	DMHRSi - Defense Medical Human Resources System-Internet	DTMS
Individual task assessments	INSCOM KM - Intelligence Security Command (INSCOM) Knowledge Management System (KM) Portal	DTMS
Individual task assessments	AMEDCS - AMEDD Center & School Army Medical Department Center and School (AMEDDCS) system	DTMS
Individual task assessments, Soldier profile data	ArmyFit - Army Fitness Platform	ACT DTMS
Individual training readiness not including PHI	MODS - Medical Operational Data System	DTMS
Installation Range and Training Area Status Reporting	ISR - Installation Status Reporting	SRPP TSIMS
Installation Real Property - Facilities, Range and Training Land	HQIIS - Headquarters Installation Information System	RFMSS ARRM SRP TSIMS
Materiel Requirements	FEDLOG - Federal Logistics	
Materiel Requirements	AESIP - Army Enterprise Systems Integration Program	ALMS

Information ATIS Needs from other authoritative Systems	External System providing data to ATIS	Current System receiving data
MIMS	TRMIS - Training Resource Model Information System (TRMIS)	TDC ATIA
Profile and Units	NGDCPDS - National Guard Defense Civilian Personnel Data System	ACT
Profile and units	ITAPdB - Integrated Total Army Personnel Database (HRC)/IPPS-A	ACT DTMS
Provides additional recruiting incentives to increase Army strength. Provides hands on training/field instruction in a specific career field. Provides grade, SQI, ASI level of detail.	PaYS - Partnership for Youth Success	ACT
Range and Real Property data	ARCENT ASG Database - Army Central Command (ARCENT) Area Support Group (ASG)	RFMSS
Range and training area scheduling, scheduling approvals	CSE - USAF Center Scheduling Enterprise (CSE)	RFMSS
Ranges and Training Area catalog and availability	DAIS - Data Analytics and Integration Support	ARRM
Student Course Completions, Course Catalog	DAU - Defense Acquisition University (System to be identified)	
Training completions	CAFRS - Centralized Aviation Flight Records System	ARTS/ GTIMS
Training completions	DCPDS - Defense Civilian Personnel Data System	WebTed DTMS
Training completions	ATCTS - Army Tracking and Certification Tracking System	DTMS
Training completions	CCIMS - Cadet Command Information Management System	DTMS
Training completions	SWANK - SWANK Healthcare & Medical Operational Data System	DTMS
Training Events	GFEBS - General Fund Enterprise Business	DTMS
Training Events and Units	JTIMS - Joint Training Information Management System (JTIMS)	ARTIMS
Training requirement	ASMIS 2.0	None

Information ATIS Needs from other authoritative Systems	External System providing data to ATIS	Current System receiving data
UIC alignments with TOE data and hierarchies	FMSweb - Force Management System – Web/AOS/GFIM	ACT ARRM DTMS
UIC alignments with TOE data and hierarchies	DRRS-A - Defense Readiness Reporting Service – Army/GFIM	DTMS
UIC alignments with TOE data and hierarchies	SAMAS - Structure and Manpower Allocation System	ARRM
Unit equipment, training data.	GCSS-Army - Global Combat Support System-Army	DTMS
User ID and Profile	EAMS-A - Enterprise Access Management Service -Army	ACT ATHD CAR DTMS LLC-Blackboard SRPP
Individual and collective task assessments, AAR, Lessons Learned	STE - Synthetic Training Environment	TDC CAR DTMS
Weapons Qualifications	TRACR -	DTMS

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APPENDIX H: ARMY TRAINING AND EDUCATION (T&E) INFORMATION CAPABILITY GAPS

H-1 Army Training and Education (T&E) Capability Gaps

The table below identifies critical, high, and moderate risk capability gaps for training and education information capabilities. These gaps were created/vetted with a wide, cross section of training organizations and legacy system functional owners/SMEs and were created to scope requirements needs into the six ATIS capability areas. The Army has limited ability across the three training domains as indicated by the gaps below:

Table Code Descriptions:
1) Risk to Army T&E ratings = C- Critical, H- High, and M- Moderate
2) Training Domain = Oper- Operational, Inst- Institutional, Self- Self Development // plus C/S = common/shared
3) T&E domain linkage = P- primary and S- secondary impacts (note that multiple can be primary)
4) ATIS Capability Area = M- Training Management, S- Scheduling, R- Resource Management, D- Training Development, C- Army Learning Content Management, E- Enterprise Architecture, Standards and Services

Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area	BUC Alignment
		Oper	Inst	Self	C/S		
Current training capabilities lack integrated and interoperable planning tools that facilitate top-down guidance and bottom-up planning that produces resourced and actionable unit training plans. (C)	C	P	S			M S	TESC 1003 2.1, 2.2, 2.3 ATMC 2015 2.1 ATMC 2009 2.1, 2.2
Current training calendars and scheduling tools do not provide visibility of availability for land, range, and facility, PODS or allocations of TADSS and ammunition that influence unit training plans. (C)	C	P	S			S	TESC 1001 2.1, 1002 2.2, 2.5, 1003 2.2, 2.3 ATMC 2002 2.1
Legacy training information systems lack centralized, comprehensive training records and analysis tools to support talent management (C)	C	P	P	P		M	EASS 6010 2.1, 2.2, 2.3
The Army lacks an enterprise scheduling capability resulting in 13 different systems with limited data sharing, integration, and redundant information (C)	C	P	P			S	TESC all MNUCs/BUCs
The Army lacks automation for training ammunition ordering between units and ammunition supply points which increases admin time and risks for human error (C)	C	P	P			R S	TRMC 5014 2.3
Soldiers enter the same data in multiple training and education systems which increases administrative burden and risk of conflicting information across systems (C)	C				P	E	EASS 6001 2.1 + HCD

Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area	BUC Alignment
		Oper	Inst	Self	C/S		
Current Army T&E systems are not user friendly or intuitive and are cumbersome to learn and manpower intensive to support. (C)	C				P	M	EASS 6001 2.2 + HCD
Current operational applications are not leveraging automated Army Organization UIC force structure data below the company level (platoons, squad, etc.) and instead use manual workarounds to arrange personnel into derivative, small units to facilitate training and resource management. (C)	C				P	E	ATMC 2000 2.1, 2.2
Current training capabilities lack the ability to view appropriate training data across echelon to inform training decisions at all levels. (H)	H	P	S			M	TESC 1001 2.2
Current training information capabilities lack ability to view and synchronize calendars/schedules across formations and with adjacent units to facilitate cross functional and multi-echelon training opportunities (H)	H	P	S			M S	TBD
Unit training calendars lack selectable data overlays which limit user ability to deconflict or conduct comparative analysis that affect training plans and schedules (H)	H	P	S			S M	TBD
The Army has limited ability to conduct analysis and design of individual and collective training products which causes disconnects between related or nested tasks and training strategies (H)	H	S	P			D	ATDC 4009 2.1
The Army lacks a distributed learning courseware authoring capability (H)	H		P		P	D	ATDC 4014 2.3
Army learners have limited mobile hand-held Bring Your Own Device (BYOD) access options and products that are built using responsive web design scalable to display screen size (H)	H				P	C	ATMC 2000 2.2, 2.6, EASS 6008 2.1
Army COMPO 2 and 3 users have limited mobile, web-enabled commercial (BYOD) access options for T&E self-development opportunities and completion of mandatory training requirements (H)	H				P	C	ATMC 2000 2.5, 2.6
The Army has limited visibility of installation training support assets (inventory) results in direct coordination with peer units, Training Support Centers, and Range Operations (H)	H				P	S	TBD

Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area	BUC Alignment
		Oper	Inst	Self	C/S		
Current T&E systems provide limited mobile access/review of training products and capture of training outcomes at training sites on/off network at the point of need (H)	H				P	M	ALCMC 3000 2.1, 3001 2.1 ATMC 2016 2.1, 2019 2.4, 2025 2.4 TRMC 5009 2.7, 2.14 EASS 6002 2.1, 6008 all BUCs
*Classified Info Gap: The Army lacks a training development capability to develop, manage, and distribute classified (secret and above) learning products (H)	H	S	P			D	No BUC for this gap. current rqmts exclude IL6 (related to ALCMC 3000 2.1 ATMC 2025 2.3)
*Classified Info Gap: The Army lacks a classified (secret and above) T&E information training management capability to record, track, and manage training outcomes and data, including aggregate reports that indicate training readiness levels (H)	H	S	P			M	No BUC for this gap. current rqmts exclude IL6 (related to ALCMC 3000 2.1 ATMC 2025 2.3)
The Army lacks capability to quickly or easily develop and manage task organizations and track those formations in current training management systems. (M)	M	P				M	TRMC 5009 2.15, 2.16 ATMC 2000 2.1, 2.5, 2.6
Current training calendars and scheduling tools provide limited visibility of availability for land, range, and facility or allocations of TADSS and ammunition for resource manager action (M)	M				P	M	TBD
Current training information capabilities provide limited visibility of reservations/scheduling (roll up) for installation and unit resources at echelon (M)	M				P	S M	TBD
HHQ and installation leaders have limited access to unit activities and schedules (M)	M				P	S	TBD

Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area	BUC Alignment
		Oper	Inst	Self	C/S		
Unit training calendar views are not scalable to planning horizons (long, mid, and short-range) (M)	M	P	S			S M	TBD
Current training information capabilities lack ability to search for/use established templates or copy and paste calendar events to include from other units (M)	M	P	P			S	TBD
The Army lacks an enterprise LMS capability resulting in 12 different systems with limited support for digital content storage, access and delivery management (M)	M				P	C	ALCMC-3001 2.1, 2.2, 2.3 ATDC-4005 2.1, 2.2 ATDC-4006 2.1 ATDC-4010 2.1 EASS 6010 2.1
The Army lacks predictive analysis decision-support tools that enable training and education planning and decision making (M)	M				P	E	TBD
The Army lacks a shared, collaborative environment to conduct thorough analysis for development of Course Administrative Data (CAD), Program of Instruction (POI), and Lesson Plan products (M)	M	S	P			D	ALCMC 3000 2.1 ATMC 2004 2.1 ATDC 4000 2.1, ATDC 4006 2.1 ATDC 4022 2.1
The Training Development Capability (TDC) lesson plan data entry tools are difficult to use. Lesson Plans are built in MS Office and then cut-n-pasted into TDC (M)	M	S	P			D	TBD
Current Army training development capability lacks a warfighter Training Support Package (TSP) development tool (M)	M	P	S			D	TBD
Current training systems lack ability to view proponent overall learning product development inventory, status, and users (M)	M		P			D	TBD
The Army's current Training Development Capability (TDC) does not provide automated job, tasks, or mission analysis tools (M)	M		P			D	TBD

Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area	BUC Alignment
		Oper	Inst	Self	C/S		
The Army's current Training Development Capability (TDC) lacks automated analytical tools to view change history of learning products (M)	M		P			D	TBD
Army Learning Management System (LMS) capabilities lack student management functions to provide current, past, and present view of distributed learning and resident students (M)	M		P			C	No BUC documented for this gap
Army Learning Management System (LMS) capabilities lack collaborative tools that capture student grades and participation in synchronous learning events (M)	M		P			C	TRMC-5014 2.1, 2.2, 2.3 ATDC 4000 2.1
Army leaders are limited to manual processes for T&E resource coordination and scheduling deconfliction such as spreadsheets, email, and phone calls (M)	M				P	M S	TBD
The Army lacks a central access point to view and request enrollment in training and education (M)	M				P	M C	TBD
The Army lacks a single user portal to plan and prepare training and education events across training domains operational, institutional, and self-development (M)	M				P	M S C	TBD
Army organizations lack an ability to conduct “what if” analysis to see how schedule changes impact training and education events and then coordinate and deconflict (M)	M				P	S	TBD
Units lack an ability to identify installation facilities/areas (dual use) available for training use which results in manual coordination with many different local managers (M)	M				P	S	TBD
The Army lacks a trusted, central database to verify certifications/qualifications for installation and range support personnel, unit trainer/instructors, and TADSS operation that is associated with an individual no matter where assigned (M)	M				P	M	TBD
Individual users lack a landing page (personalized operating picture) to configure and monitor what T&E information is important to them and receive key notifications and alerts (M)	M				P	E	TBD

Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area	BUC Alignment
		Oper	Inst	Self	C/S		
Unit leadership has limited ability to communicate key training and education information and alerts directly to subordinate members outside of email (M)	M				P	E	TBD
Training systems have limited Ad Hoc, web interface capability to enable authorized user creation of custom query reports to include locally defined reports (M)	M				P	E	TBD
Army training systems lack a common/standardized methodology for report creation which limits the ability to share organized T&E information (M)	M				P	E	TBD
The Army lacks automated tools to target, task and verify mandatory training assignment, compliance, and reporting which is currently limited to manual processes (spreadsheets, SharePoint, etc.) (M)	M				P	M	TBD
The Army lacks central access to trusted, authoritative training and education records and are limited to manual processes to survey units and aggregate responses to leader inquiries (M)	M				P	M	TBD
Current training systems lack integration or interoperability with G-1 and G-3 systems which requires users to enter duplicate data in both T&E and external systems (M)	M				P	E	TBD
Leaders/mentors lack automated tools informed by T&E records to manage unit operations (troop to tasks), assignments, and match duties with experience and qualifications (M)	M				P	E	TBD
Many T&E systems are not compliant with current DoD and Army data standards (VAULTIS). (M)	M				P	E	TBD
Current training and education information systems are not aligned to the Army Business Enterprise Architecture (ABEA) (M)	M				P	E	TBD
The Army lacks a centralized, automated utilization tracking and analysis tool to support management, distribution/deployment, and resourcing decisions for training enabler capabilities. (M)	M				P	E	TBD

Army Training and Education (T&E) Capability Gaps	Risk	TRADOC Training Domains				ATIS Area	BUC Alignment
		Oper	Inst	Self	C/S		
The Army Training Development Capability (TDC) lacks the ability to automate import of current/revised data for references, FedLog information, ammunition, Skill Identifiers, Duty Position, MOS/AOC, MTO&E, TADSS etc. (M)	M				P	D	TBD
The Army's current Training Development Capability (TDC) lacks a way to calculate total cost of resources for a specific POI or lesson plan (e.g.- all classes of supply, instructors, and other supporting equipment). (M)	M		P				TBD

Table Code Descriptions:
1) Risk to Army T&E ratings = C- Critical, H- High, and M- Moderate
2) Training Domain = Oper- Operational, Inst- Institutional, Self- Self Development // plus C/S = common/shared
3) T&E domain linkage = P- primary and S- secondary impacts (note that multiple can be primary)
4) ATIS Capability Area = M- Training Management, S- Scheduling, R- Resource Management, D- Training Development, C- Army Learning Content Management, E- Enterprise Architecture, Standards and Services

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H-2 Capability Gaps from the ATIS Capabilities Based Assessment (CBA)

In January 2008, TRADOC DCG approved adoption of sixteen Army training and education information capability gaps shown in table below. TRADOC deems the operational risk of these unmitigated capability gaps to be unacceptable. This adoption also allows analysis of materiel and non-materiel approaches to close or mitigate some or all of the identified capability gaps.

Table 22: Gaps from Capability Based Assessment

ID	Capability Gap	Capability Gap Description
CG-1	Connectivity	Provide authorized users of education and training data/information connectivity to acquire/see that material. In other words, the information (and the user) are net-ready.
CG-2	Store, search, retrieve data	Provide authorized users the capability to store, search, and retrieve education and training data/information. This also implies that the information is platform-independent.
CG-3	Data Security	Maintain security of education and training data/information. It must be segregated by classification, and it must be "un-seeable" by those who should not see it.
CG-4	Access to Data	Provide the capability to control access to education and training data/information. Grant access to those who need to see training information.
CG-5	Timeliness of Data	Provide the capability to deliver training products and materials to authorized users when and where needed. The latency of delivery must be acceptable to the user.
CG-6	Data Standards	Capture education and training data/information using specified data that is defined according to certain standards, such as those expressed in the DoD Net-Centric Data Strategy.
CG-7	Data Availability	Make the education and training data/information available anytime, anywhere. This means even when the user is not connected to a network.
CG-8	Data Understanding	Make the education and training data/information sharable, manageable, and synchronize (time stamped) for effective sharing between users.
CG-9	Expose Data	Make the education and training data/information viewable, visible, and displayable according to the user's needs and capabilities.

ID	Capability Gap	Capability Gap Description
CG-10	Data Modification	Make the education and training data/information modifiable only by the appropriate owner (training proponent).
CG-11	Net-Centric Data	Make the education and training data/information Net-Centric compliant. This means it is: Visible; Accessible; Institutionalized; Understandable; Trusted; Interoperable; Responsive to user needs.
CG-12	Data Relevance	Make the training information usable to the person seeing it, according to the user's particular role in the training environment. The user must be able to answer "yes" to these questions about the information being viewed: - Is it relevant and valid to me? - Is it presented in an understandable way for me to process with respect to my role (context) in the training environment?
CG-13	Data Context	Make the person seeing the information able to process the data/information for the right context. From what he is seeing, the user must be able answer "yes" to these questions: Does it contain the right data for me? Is it sufficient to support the action I need to take? Am I able to do what I need (e.g., deconflict, decompose, synthesize analyze, correlate and evaluate) to the information I am seeing in order to act on it?
CG-14	Actionable Data	Make the education and training data/information actionable. The user must be able to answer "yes" to this question: Is the information I am seeing able to support the decision I need to make?
CG-15	Request More Data	Make it possible for the user seeing the information to retrieve more training information if he cannot answer yes to each question in tasks 12, 13, and 14.
CG-16	Act on Data	Make it possible for an authorized user to create or modify education and training products or materials.

2555 **Source: ATIS CBA, JAN 2008**

APPENDIX I: SYSTEM/FUNCTIONAL CAPABILITIES OVERVIEW

This section provides an expanded view of current system/functional capabilities, limitations, and gaps. It also conveys additional details on desired ATIS end state objectives in terms of the system or functional area.

I-1: Army Training Management System (ATMS)

Current Capabilities, Limitations, and Gaps: The Army Training Management System (ATMS) is the Army's legacy, Enterprise-level, web-based, training management system. It is comprised of the Digital Training Management System (DTMS), Course Manager (CM), the ATMS Development Tool (ADT), the Army Training Network (ATN) website and various automated tools. ATMS provides the Operating Force with the capability to manage task-based individual and collective training from squad to Army Service Component Command. It provides Army Proponents with the means to develop and deliver SRC TOE-based, Standardized METL, Combined Arms Training Strategies (CATS), and weapon training requirements. Through Course Manager, ATMS also provides the Generating Force the capability to manage student training while attending institutional courses (or Troop Schools) through gradebook automation. Lastly, ATMS provides HQDA with an enterprise-level, training data sharing service for integration with other systems and business domains. ATMS also provides the HQDA G 3/5/7 and ACOMs with a means to communicate unclassified training guidance and make a wide variety of proponent/SME developed training materials available to the field.

The Digital Training Management System (DTMS) provides capability mostly dedicated to recording task-based training completion results, viewing associated training statuses through standardized dashboards/displays, and through filterable, preconfigured reports. Units record HQDA-designated training results for task evaluations and commander's assessments, individual and crew-served weapons qualifications, Army Combat Fitness Test (ACFT) scores, height and weight, Sexual Harassment/Assault Response and Prevention (SHARP) training, and other training data, such as airborne jump records. The current DTMS dashboards, Small Unit Leader Tool (SULT), and the Digital Job Book (DJB) provide a mechanism to view existing data for reporting or to inform future planning and training decisions. However, DTMS provides company level leaders with limited planning utility due to the lack of its use above brigade level. Lack of integration with the Army enterprise systems managing ReARM processes and force provider/ASCC level scheduling limits DTMS use by Corps and Division headquarters. DTMS also does not interface with RFMSS or TAMIS and therefore it does not support resource coordination and allocation. Absent the digital delivery of top-down training plan, tactical units below brigade use DTMS to varying degrees. Additionally, non-task-based training requirements often emerge from HQDA which are difficult for operational units to collect and report on due to lack of standardization. The Army looks to ATIS to provide more comprehensive, integrated training management capabilities that support the entire training management process and spectrum of requirements.

SULT and DJB are DTMS-supported capabilities that users interface through ATN. The Digital Job Book, available to all Soldiers, allows them to view training and qualification information recorded in Digital Training Management System (DTMS) such as Army course registrations, physical fitness test scores / status, weapons qualifications, unit training schedules, and training tasks completed or assigned to them for study. It also provides access to proponent-developed training products such as Individual Critical Task Lists, Army Warrior Tasks, Battle Drills and Training & Evaluation Outlines. The Small Unit Leader Tool provides small unit leaders with a means to view, update, and record directly into DTMS their Soldiers training and qualification information to include Army Physical/Combat Fitness Test scores/status, height/weight, weapon assignments/qualifications, and Army Warrior/mandatory/critical task completion. Tool access is granted by commanders/first sergeants through the unit's DTMS operator.

ATN provides universal CAC access to every Soldier and Civilian in the Army, with the option to configure a username and password through Enterprise Access Management System-Army (EAMS-A). DTMS is more tightly controlled, with commanders responsible to manage unit level access for those that need execute training management functions.

The ATMS Development Tool (ADT) provides Army Proponents with the means to develop and deliver SRC TOE-based, Standardized METL, Combined Arms Training Strategies (CATS), and weapon training requirements. However, ADT provides limited capability to apply meta-data to the elements within the CATS and METL that would complement training planning functionality in DTMS. The Army looks to ATIS to provide expanded meta-data tagging capability to enhance delivery of planning capabilities in DTMS. Additionally, many supporting functions in ADT are manual in nature. The Army looks to ATIS to automate this function for data import from other systems of record.

Planning and Preparation: The ATIS Army Training Management Capability (ATMC) will provide the capability to support and automate all phases of the training management cycle described in FM 7-0, Training (FM 7-0, Figure 1-2) from the force provider/ASCC level down to the squad/team. Commanders and leaders at all levels will be able to plan and prepare training using information and data that is internal to ATIS and imported from external data sources. Beginning with the Army Synchronization Tool (AST), Commanders will find the Annual Training Guidance (ATG) at the appropriate echelon, command and installation resource prioritization and time management cycles (red-amber-green), Mission Essential Tasks, proponent recommended training strategies, and Task and Evaluation Outlines (T&EO) within ATIS to support a top-down training process. Along with the required information, ATMC will provide commanders and leaders with automation tools that help them with the process of selecting tasks to train, prioritizing those tasks, and then selecting the appropriate events to include in their plan. Seamless integration between ATIS Training Enterprise Scheduling Capability (TESC) calendars and scheduling tools from force provider/ASCC down will allow the commander and leaders to visualize the training plan, communicate and synchronize the plan across all echelons, and execute coordination for training support and resources. ATIS will provide a mechanism to digitally deliver training plans, calendars, events, and schedules using a top-down, bottom up, refinement process. The calendars provide selectable information “overlays” that show time management cycles, range and resource availability, multi-echelon events, opportunity training with adjacent units, and a multitude of other information elements to de-conflict and optimize training time and resources.

The ATIS calendars and scheduling tools support briefings, training meetings, and are reconfigurable with scalable views to support long-range, mid-range, and short-range planning and preparation. ATIS calendars feed training schedules that units lock and publish at specific time horizons based on COMPO. All appropriate personnel can access calendars and schedules to ensure training plans are coordinated, nested, and synchronized. ATIS training calendars and schedules will provide data to external systems, such as Outlook to ensure consistent communication and reduce redundant data entry.

The calendars and scheduling tools provide a digital link between training units, resource owners, and training support organizations to communicate and synchronize training plans, optimize resource allocation and utilization, and ensure priority training elements receive resources in a timely and unimpeded manner. Customizable workflows within the system allow commanders to request resources, higher echelons and leaders to validate those requests, and installations or resource owners to approve and assign requested resources, or offer alternative land/range/facility accommodations. ATIS system workflows facilitate the request and approval process while allowing tailorable business rules that conform to different regional, installation, or command policies.

Proponent Recommended Training Strategies and Plans: Commanders and leaders rely upon branch proponents to provide training strategies and plans that help units sustain current training proficiency or improve proficiency levels to the objective level specified in training guidance. The legacy ATMS Development Tool provides capability that proponent analysts use to build the Combined Arms Training Strategies (CATS) within ATMS based on training products received from the legacy Training Development Capability (TDC). However, the two tools are not natively connected which requires training developers to work within separate data environments. ATIS will subsume both ATMS and TDC and provide an Army Training Development Capability (ATDC) to develop the CATS and make them available to users as a stand-alone report, or provide the foundational data for the planning tools.

In addition to the proponent recommended strategies, the proponent training developers use the ATDC to develop warfighter training support packages (wTSP), collective tasks, drills, and individual tasks. ATIS will provide analytical tools within the training development capability to assist with the training analysis to ensure that the tasks indicate linkages that nest necessary competencies from the mission essential

tasks (MET), through the platoon and other small unit battle task, down to the individual tasks. With an overarching strategy and nested tasks, the ATIS planning tools use the proponent identified skill hierarchy to help Commanders and small units identify tasks in the ATMC to train; then plan, resource, and coordinate training events utilizing Proponent developed training plans as a reference. The quality of the proponent developed strategies, plans, and collective training products will influence how well the ATIS planning tools automate the planning process. The planning tools are only as good as their source data.

Execution, Evaluation, and Assessment: During execution, ATIS supports commanders, leaders, and Soldiers by providing mobile capability for use at the training site. The mobile presence provides access to T&EOs, training support packages, AAR templates, other proponent-approved standard products. Unit leaders and evaluators use the mobile ATIS interface to record training evaluations at the performance step level in real-time for individuals and units. Direct input at the training site removes the additional step of manually transferring analog results to the system, saving time and reducing the risk of clerical errors. In austere or rough conditions where using a mobile device is not feasible, the ability to scan results from analog sources (score cards, T&EOs, etc.) provides similar time savings and data quality.

At the conclusion of training execution, commanders and leaders use ATIS to record evaluations and assessments, scores, performance data, AARs, resource utilization, and other lessons learned that inform future plans, resource allocations, and proponent training product quality assurance processes. Leaders and evaluators enter, scan, or take a picture of the go/no-go information for performance steps and measures, which auto-populates into a digital T&EO. The system uses other information from the training event details to automatically fill the objective task evaluation criteria matrix and calculate the T, P, or U evaluation. Commanders use the evaluation, performance data, and a number of other factors to assess the tasks. ATIS will provide MET assessment data to the Defense Readiness and Reporting System – Army (DRRS-A) to inform the Unit Status Report

Individual and Unit Training Records (ITR and UTR): The foundation of ATIS capability is a robust database to enable unit commanders to maintain training records for individuals and units in accordance with AR 350-1 and associated HQDA instructions. ATIS will be the authoritative data source for training completion data and will maintain current and historical training data. ATIS will maintain a comprehensive training record that follows an individual's training journey from initial entry to terminal rank, and potentially through secondary careers as contractors and Civilian professionals. ATIS will maintain interfaces with multiple external authoritative data sources (ADS) to create, align, and associate training records for unit command responsibilities. Unlike legacy systems, ATMC will be able to automate unit battle rostering of personnel to organizational equipment below the company level down for training management purposes. Examples include Army Organization Server (AOS) for force structure, and Integrated Personnel and Pay System – Army (IPPS-A), Defense Manpower Data Center (DMDC), and Civilian Human Resources Activity (CHRA) for personnel data. ATIS will provide the Army enterprise with an authoritative data source based on those training records to support Army business processes that require Soldier and unit training data. Examples include Human Resource domain defense business systems (DBS) for personnel actions and the Army Trainings Requirements and Resources System (ATRRS), the Synthetic Training Environment (STE) and the Defense Readiness Reporting System – Army (DRRS-A) in the Training and Readiness Domain, as well as other authorized systems for research processes.

Taking an important evolutionary step forward in training automation, the ATIS objective system will interface with Training Aids, Devices, Simulations, and Simulators (TAADS) at the point of training to natively collect training performance and outcome data relevant in the maintaining individual and unit training records. This capability will relieve the burden for manual data entry at unit level while expanding both the scope and volume of potential training data and improving its accuracy. Examples include range instrumentation through the sustainable range program (SRP) enhancements and with the STE to collect high fidelity training data. Range instrumentation and simulations provide valuable performance data to ATIS that help leaders train and develop Soldiers by better identifying strengths and weaknesses that affect qualification. Current training management legacy systems only track qualification outcome data that indicate how Soldiers and crews did at a range. Performance and biometric data will allow leaders to understand why they qualified with a specific score and how to efficiently address training shortfalls. Increased fidelity and understanding will influence future training plans and talent management decisions.

ATIS will provide customizable database query tools which provide business intelligence displays and recurring reports. Users can pull reports to ensure compliance, facilitate talent management, develop order of merit (OML) lists, or contribute data to research for future Army initiatives. The report capability will conform to data security and risk management restrictions to ensure appropriate handling of PII, PHI, or other CUI.

Training COP (Dashboards, Small Unit Leader Tool, and Digital Job Book): Training dashboards, training common operational pictures, small unit leader tools, and a digital job book (read only) within ATIS will provide users the ability to view and edit important information to make leadership decisions for their unit at echelon or own their training readiness. Data visualization and predictive analysis tools give raw training data meaning and help leaders understand—at a glance—how their decisions impact training and mission readiness. Appropriate information at each echelon show how individual Soldier proficiency, crew and small team competency, and company performance progressively build lethal, capable units. Crew and small teams can be built around kinetic weapons systems and platforms displayed by roster. In addition traditional weapons-centric crews, ATIS groups and displays non-kinetic crewed systems or teams such as those that are monitored within the Military Intelligence Training Standards (MITS). The ability to visualize the proficiency that starts with tasks and drills and builds through gunnery or similar qualification is essential to maintaining skilled organizations.

The dashboards are tailorable to allow commanders and leaders to prioritize the information that's important to readiness, mission success, and promotes clear, shared priorities between the levels of leadership. The data visualization tools will also be customizable, allowing users to select different visualization techniques, such as pie charts, bar graphs, heat maps, etc. Applying predictive analysis to those graphical tools allows commanders to determine what their training data looks like over time. The ability to project the unit's status for training at 30, 60, 90 days based on multiple factors such as task atrophy, personnel turbulence, scheduled training and more helps determine whether upcoming training plans are adequate to maintain and acceptable level of readiness. Similarly, data visualization and predictive analysis tools within the ATIS Digital Job Book help individuals take a greater degree of ownership of their training goals and current readiness. Soldiers see their current status with visual cues, such as heat maps or color coding, and can plan or pursue training opportunities.

Reserve Component (USAR & ARNG) Specific Tools: The reserve component requires additional training management capabilities to manage unique training requirements and the logistical challenges associated with transporting Soldiers from their home-of-record to the training site. ATIS will manage USAR Battle Assembly (BA) plans and ARNG drill weekend schedule. BA and drill plans includes dates, times, multiple unit training assembly (MUTA) Number, location, major event or training highlight, and training point of contact. ATIS will pre-draft the associated BA memorandum for record (MFR) that includes Unit Commander's signature block.

Course Manager Capabilities: Course Manager requirements will be manifested in the Army Learning Content Management Capability of ATIS. However, ATIS will ensure Army school data in ATMC to include Digital Job Book/Small Unit Leader Tool capabilities provide operational unit leaders with visibility of course, class, and student information from ATRRS. Additionally, ALCMC and ATMC will be integrated to ensure training completion information associated with class assignments in the class gradebook and auto-populates task evaluations to the Soldier's individual training record to maintain a digital linkage between institutional trainers and operational leaders (i.e., first/next unit chain of command) to support continuity for Soldier training.

ATN and Training Content Hosting: ATN is a web-based platform using a Content Management System to deliver and support the Army Training Management Proponent's capability to deliver the Army's training management doctrine (Army Doctrine Publication 7-0 and FM 7-0), concepts and processes and provide access to ATMS functionalities. ATN also serves as the Army's access portal for all AR 350-1 Mandatory Training. ATN provides the Army, specifically HQDA G-3/5/7 and ACOMs a platform (managed webpages) to disseminate information and command training guidance across the force. ATN provides a platform for the Army to access a wide variety of proponent and subject matter expert developed training products (currently over 150 unique customized webpages from 40+ proponents) and tools displayed on tailored webpages. ATN hosts unclassified to include CUI and other distribution

restricted content. ATN provides access to training material via CAC login and Username/Password for mobile devices. ATN will link to applicable ATIS tools and capabilities.

DOTMLPF-P Implementation Recommendations: The Army will require changes to the DOTMLPF-P that complement the materiel (M) solutions provided with ATIS. Cyber policy will need to evolve to achieve future data sharing and visibility goals, such as data exchange with Outlook calendars and mobile access on personal devices. Army leadership should consider Doctrine/Regulation changes to refine the way proponents develop CATS, proponent recommended plans, and collective training products. To ensure Soldiers and leaders have adequate access to the ATIS tools, organization changes to field more computers/tablets to companies that need greater, more persistent access to ATIS will likely be necessary. Training (like the TMD's MTT) is necessary to ensure the Army employs ATIS, as intended, to get the most utility possible from ATIS. There will likely be additional recommendations as the ATIS capabilities take shape and the force observes challenges and opportunities ATIS provides.

I-2: Sustainable Range Program (SRP) Portfolio of Products Requirements per ATIS Capability

TESC

The TESC Scheduling capabilities involve the planning, requesting, approving, and receiving the reservations of necessary resources and facilities… Basically TESC is understood to represent the requirements of ATIS intended to replace the legacy DTMS system which should interface to the TRMC functionality (primary home of most SRP Portfolio requirement) for resource request submittals and reservation confirmations, as well as any requirements for access to historical resource usage/utilization data needs.

The understanding is that the TESC Scheduling capability within ATIS is intended to focus on the pre-resource management involvement part of the process of unit schedule planning and schedule request workflows of required or necessary resources and facilities from the unit training management perspective. Given that understanding, it is suggested that the requirements falling within that capability can be viewed from a breakdown of the 5Ws of schedule planning for that training, whether the training management is emanating from that of an operational unit perspective OR that of an institutional unit perspective.

The WHO of TESC Scheduling functionality represents either the user performing the scheduling function OR the individual or entity actually performing or involved in an event/activity/class/session actually needing to be scheduled and will fall into these general categories of users or entities available to be scheduled: Individual (DAC/Soldier/Contractor/Military Dependent), Collective unit configurations Squad/Team thru Corps, Non-standard Unit Configuration (Mission Specific/SMUs/TFs, etc.), and Non-Army units and entities (“Non-ASIP” Units)

The WHAT of TESC Scheduling functionality is the event/activity/class/session, etc needing to be scheduled to meet the requirement of the given WHO and will fall into these general domain-based categories of such: Operational training/events (both standard and non-standard), Institutional / Educational activities/classes (both Proponent Mandated/Required (POI), as well as Proponent Optional, and Self-development/Professional Development.

The WHERE of TESC Scheduling functionality is any training resource/training enabler required for execution of the planned event/activity/class/session, etc including but not limited to the following: Land-based & Water-based Ranges (Outdoor/Indoor, Live-fire/Dry-fire/Non-fire), Training/Maneuver Land, Airspace, Non-fire Support Facilities, Simulations Facilities, Classrooms, TADSS, Billets, Transportation/Support Vehicles, Training Support Materials, and Training Instructors/Consultants.

The WHEN of TESC Scheduling functionality is the standard time frames in which a specific schedule planning workflow may fall and are regularly recognized or labeled as Long-term planning, Near-term planning/plan refinement, and Short-term / Last minute “opportunity” planning.

The HOW of TESC Scheduling functionality is the description of a high-level set of details necessary to successfully meet the capability requirement and include the need to provide the following:

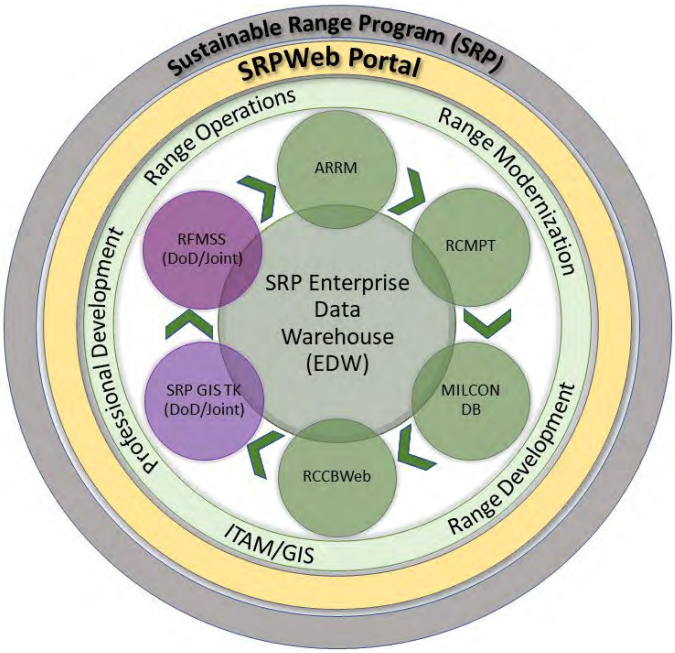
- Access Control/Filter Views by User Roles and Permissions at all levels of training hierarchy
- Modification/Editing of schedules controlled by User Roles/Permissions at all levels of individual or unit hierarchy
- Visibility of training resource availability during schedule planning phase, both textually and graphically
- Initiation and Current Status of the schedule request submission and approval process workflow for all training resources/enablers, Operational and Institutional event accomplishments recording and reporting for all levels of training (individual, collective and unit)

- Institutional Schedule planning and schedule request submission workflow for Proponent School and Army University military educational level / Degree Conferring colleges
- TSP/WSP supporting documents provided to event instructors/trainers
- Identification of potential scheduling conflicts and/or resource co-use training opportunities at the schedule planning stage and workflow tracking of the requests/coordination/approvals within the process
- Integrated automated submission and workflow tracking of ammunition requests to TAMIS at the schedule planning stage
- Within the operational realm, complete resource utilization, individual and collective results, safety reporting, UXO and exercise AAR/Feedback
- Within the institutional realm, complete resource utilization, student grades/transcripts/certificates and course syllabi/materials are accessible to individual educational records and Army University universal transcript. POI, instructor and student materials provided to course instructors/educators.

Generally-speaking, the TESC capability (and requirements within) become the “home” and the engine/workhorse for the “new DTMS” application product requirements within ATIS which should then interface with a modernized, cloud-based RFMSS to allow the TESC/DTMS users to take advantage of the RFMSS RTVS and Future Date Tool products to gain GIS-based schedule planning capabilities during the schedule planning/training management activities. In addition, TESC/DTMS functionality would then interface with the ATIS TRMC capability (anchored by a modernized/cloud-based RFMSS) for resource request submission and approval workflows with any resulting confirmed reservations sent back via the interface to TESC/DTMS. This interface would also allow for visibility of available resources during the schedule planning phase before requests are even submitted. TESC/DTMS functionality should also support an interfaced auto-submission of ammo requests to TAMIS

TRMC

SRP Portfolio of Products "circle of life" diagram below gives indication to the necessary internal integrations and workflow requirements of the family of SRP applications with the portfolio. It is intended that the ATIS TRMC capability house the majority of SRP portfolio requirements.



TRMC centers around the holistic management of all training resources in support of the execution of the planned and approved training and education events and includes support via the required real time command & control (C2) of each actual event/resource usage. This C2 actually begins at the time the resource is requested (via workflows initiated by the TESC capabilities/ functionality), continuing through the confirmation/reservation of the requested resources, then followed by the real time tracking of the event/use of the resource as it occurs (if such real time/day of tracking of the resource is required) and culminating with the recording of actual event results/resource utilization data for historical reporting and analysis.

In addition, TRMC capability functionality must include resource management requirements that reflect the complete life cycle of training resources, especially that of training ranges and lands in every Army, Army National Guard, and Army Reserve installation training complex. These very specific requirements focus on the overall executive agency and HQDA level needs to model, plan, construct, manage, and rehab these training resources, but also include requirements that must begin at the installation level. These requirements along with those training manage previously presented for support the missions of the Sustainable Range Program (see AR 350-19) which is the Army's roadmap for how it designs, manages and uses it ranges to ensure the capability, availability, and accessibility of its ranges to meet its training. The SRP portfolio of products "circle of life" diagram (above) is intended to depict a visualization of the complete SRP resource management process flow.

As depicted in the SRP portfolio of products "circle of life," SRP requirements within TRMC begin with modelling live training requirements (operational and institutional) and on-hand capacity to determine the types, amount, and location of training ranges/land needed to perform doctrinal training. This involves collection of many types of data including training doctrine, force structure, unit stationing and weapons authorizations, real property inventory, live fire training strategy, facility status, and programs of instruction from authoritative data sources. Installations use the requirements data from ARRM to prepare their Range Complex Master Plan (RCMP) (using the RCMP Tool (RCMPT). Creating and annually

reviewing/updating the RCMP ensures that all facility modernization and land management activities are complementary and focus on supporting the installation's training mission. The RCMP includes the installation's project list for building new ranges or upgrading existing ranges to support the training that is required in the future. Project information includes an analysis of alternatives study, and associated maps of the specific range footprint (derived from the RMTK Range Development and Planning (RDAP) tool), live-fire danger zones (derived from the RMTK Surface Danger Zone, Weapons Danger Zone, Foreign Surface Danger Zone, and Probabilistic Surface Danger Zone tools), airspace requirements, military range and training related features, and critical infrastructure features. The maps must follow the standards provided in the geospatial data Quality Assurance Plans. Projects for each installation are evaluated by the Command and by SRP to determine if they meet the standard criteria for Military Construction or OMA/OPA potential funding. Projects are then prioritized in a set of lists, tracked by the MILCON Dashboard or the SRP TFML UFR Project list, depending on the type of project/funding. When the project is completed, the new or updated range/training land is identified with a real property unique identifier (entered into real property), and becomes available for complete resource management command and control via RFMSS. An important part of the range modernization process is the Range Configuration Control Board, which develops and establishes common design standards for range facilities and the devices used on Live-Fire Ranges within the SRP. The RCCBWeb application manages the requests for change to design standards from participating agencies. In addition, if an approved RCCB change impacts a range that is scheduled to be built, that change is noted in the MILCON Dashboard to ensure the range is built to the latest standards. The SRPWeb Portal serves as the central hub for securely accessing all of the applications and information that support this process (See EASS Capability Requirements).

The SRP RMTK product mentioned above is part of the SRP GIS Toolkit within the SRP Portfolio. SRP GIS TK is a highly specialized, customized suite of desktop applications that extends the functionality of the ArcGIS software suite. Its purpose is to provide geospatial tools that support the Army Sustainable Range Program (SRP) IAW DoDI 8130.01, AR 350-19, and AR 115-13. Specific desktop tools include the Range Managers Toolkit (RMTK), the Military Installation Map Toolkit (MIMT), and the Army Metadata Editor Tool (AMET). RMTK is a suite of 9 tools designed to meet the needs of range managers throughout the Army and Marine Corps. RMTK tools aid Range Operations Staff with daily operations and planning tasks. RMTK provides an automated tool that aids Range Control in modernizing ranges and operating the range complex while ensuring realistic and safe training opportunities. It automates many of the standard procedures prescribed in DA Pam 385-63 (based on policies prescribed in AR 385-63/MCO 3570.1C) for the safe firing of ammunition, demolitions, lasers, guided missiles, and rockets for training, target practice, and, to the extent practicable, combat. It also provides guidance for the application of risk management in range operations. The Surface Danger Zone (SDZ) Tool is used as a quick, simple, and accurate method for creating SDZs to ensure a safe training environment during live fire training. The Noise Tool is used to place noise contours in the context of other installation map layers to gain better situational awareness of their range complex and take action to mitigate potential noise complaints. The Range Development and Planning (RDAP) Tool is used to create and modify TC 25-8 standard ranges and associated Range Operations Control Area facilities for planning purposes, during range modernization planning charrettes, or as part of the Range Complex Master Plan process. The Explosive Training Range (ETR) Tool is used as a quick, simple and accurate method for evaluating explosive hazards associated with breaching exercises and explosives training on military ranges. The On Range Ammunition Handling (ORAH) Tool is used as a quick, simple, accurate method for evaluating the explosive potential of ammunition temporarily stored on ranges during live fire exercises. The Weapon Danger Zone (WDZ) Tool provides a quick, simple, accurate method for creating WDZs for air to ground weapons to ensure a safe training environment during live fire exercises. The Laser Range Management Tool (LRMT) assists Laser Range Safety Officers in certifying Army ranges for laser operations and in planning for laser operations on certified ranges. The Foreign Surface Danger Zone (FSDZ) Tool allows Range Officers to generate SDZs for foreign weapons in accordance with that nation's range safety policy requirements. The Probabilistic Surface Danger Zone (PSDZ) Tool generates SDZs incorporating probabilistic methodologies developed under the auspices of the NATO Range Safety Working Group and International Range Safety Advisory Group. MIMT is a set of tools developed for SRP GIS personnel to quickly and cost-effectively create standardized Military Installation Maps (MIMs) to be sent for production to the National Geospatial-Intelligence Agency (NGA) and Defense

Logistics Agency (DLA). MIMT standardizes the font, layout and format of MIMs, including placement and types of cartographic elements such as a title, scale bar, north arrow/declination, legend, military grid reference, and slope guide, to name a few and has been utilized to create over 100 standardized MIMs available in digital format from the SRPWeb Portal and in hard-copy format from DLA. The AMET is a set of tools developed for Army Installation Geospatial Information and Services (IGI&S) personnel to quickly and cost-effectively create, edit, and validate standardized metadata for Army installation geospatial data in meeting the requirements of DoDI 8130.01, AR 115-13, and AR 350-19.

Within TRMC, the SRP Portfolio resource management C2 requirements flag shipped by RFMSS requirements can also be viewed from the lens of the 5Ws as they are specifically related to schedule planning from the perspective of training resource management, whether the training management is emanating from that of an operational unit perspective OR that of an institutional unit perspective. A modernized, cloud-based RFMSS (which currently performs all levels of Resource Management C2, including being the ADS for live training resource utilization data) with the addition of necessary web service and data interfaces to the TESC capability would serve as the baseline/anchor for solutioning the implementation of the TRMC requirements. This baseline would then be complemented by the other updated/modernized products within the SRP suite of Products to satisfy the complete SRP portfolio "circle of life" requirements set.
This 5W narrative demonstrates the value of utilizing a modernized and integrated RFMSS as the anchor for all ATIS requirements within the resource management realm.

The WHO of the TRMC Resource Management C2 functionality represents users from the different perspectives of training resource management including the Training Resource Management Authorities/Teams/Staff and all Army Users/Consumers of Training Resources. Of equal significance is that it also includes the Non-Army units and entities ("Non-ASIP" Units) whose "scheduling" would not go through any of the TESC/DTMS schedule planning workflows, and instead would go straight to the resource management functionality (TRMC/RFMSS) to schedule their resources.

The WHAT of the TRMC Resource Management C2 functionality reflects the significant set of requirements to provide complete command and control of all scheduling workflows from the resource management perspective, as well as the oversight and management of the usage of the resources. The high-level perspective of these requirements include:

- Providing scheduling deconfliction/co-use coordination and approval confirmations/reservations of resources/enablers requested via the desired domain-based (Operational/Institutional/Individual Self/Professional Development) schedule planning functionality for Army units at all levels
- Providing scheduling deconfliction/co-use coordination and approval confirmation/reservations of resources/enablers for "non-ASIP units" that originate at the resource management level instead of the unit/individual schedule planning level
- Provide real time C2 of the use of resources that require such real time monitoring and control (e.g., fire desk control of an installation's training complex for C2 of all ranges, training lands, maneuver lands, airspace, etc.)
- Provide capturing of real time resource usage data for historical reporting and analysis
- Any/All Training Resources/Enablers Any training resource/training enabler required for execution of the planned event including:
    - Land-based & Water-based Ranges (Outdoor/Indoor, Live-fire/Dry-fire/Non-fire)
    - Training/Maneuver Land
    - Airspace
    - Non-fire Support Facilities
    - Simulations Facilities

- Classrooms
- TADSS
- Billets
- Transportation/Support Vehicles
- Training Support Materials
- Training Instructors/Consultants

The WHERE of the TRMC Resource Management C2 functionality requirement reflects that the resource management C2 must have primary focus at the installation level due to the requirement to support the installation-specific needs and SOPs. The significant need to support installation-specific resource management C2 is the nucleus of this requirement. In addition, there is the requirement to support resource management C2 at the unit level for unit-owned resources, with this capability also demanding installation-specific flexibility.

The WHEN of the TRMC Resource Management C2 functionality covers the requirement to apply command and control at the time that any training resource or enabler is requested and in need of a confirmed reservation, on the actual "day of" the use of the resource that has been reserved (i.e., real time management/C2 of the resources being used on any given day), and anytime historical reporting or analysis is needed on the captured and stored resource usage data. With respect to the latter, it is significant to note that the historical resource management usage data gathered and stored by the current RFMSS system has been designated as the Authoritative Data Source (ADS) for all live training resource utilization.

The HOW of the TRMC Resource Management C2 functionality is the description of a high level set of details necessary to successfully meet the capability requirement and include the need to provide the following:

- Access Control/Filter Views by User Roles and Permissions at all levels of training hierarchy
- Unit reservations are integrated with Operational / Institutional schedules and visible to entire command & training hierarchy but only editable on role-based permissions.

Generally speaking, the complexity of the required functionality within the TRMC Resource Management command and control capability and its integral relationships with the TESC capability requirements can presented in the following somewhat simplified perspective:

- TESC requirements encompass the "unit scheduler" role in current RFMSS where the all unit schedule planning and chains of command workflow approval process would occur and then the request would be "entered" into RFMSS. There is a need to also provide RFMSS RTVS and Future Date Tool capability to TESC to provide this additional convenience to unit schedulers during their unit schedule planning.
- TRMC is anchored by RFMSS where RFMSS would be the primary hub for all C2 of resources (or possibly all resources BUT those that are unit owned and managed via TESC functionality?)
- The actual resource request for reservation from the TESC process would occur via web service interface with TRMC/RFMSS providing for auto submittal of the request to RFMSS allowing for the resource management approval/confirmations/reservations workflows to kick in. Reservation confirmations are sent back to TESC via web service interface to populate the unit planning calendars with the approved resource reservations.

ATDC

Requirements for SRP Professional Development/ROPD Multi-services Resident and Distributive Learning Course Development & Updates are housed within this ATIS capability. The current set of general ATDC requirements incorporate the majority of the SRP requirements within this realm. Those very specific, unique to SRP requirements, not found in the general ATDC requirements, are detailed in the SRP MNUC/BUC addendums to this capability set.

ATMC

While initial efforts placed the "Perform Range Complex Command & Control (Fire desk Operations)" requirements into this ATIS capability set, TRMC is the preferred ATIS capability home for this set of requirements because this is the very flexible functionality inside RFMSS that not only can perform Training Range Complex C2, but can also perform the C2 of any other training resource/enabler (if configured appropriately) that would be required or desired. The recommendation is to remove these requirements from ATMC and add them to TRMC so that the C2 functionality can be applied to all areas/types of resource management.

ALCMC

Similar to SRP requirements within ATDC, the SRP requirements to "Maintain and manage ROPD Training Course Content/Courseware repository" incorporate well into the existing general set of ALCMC requirements. Any specific, unique to SRP requirements, not found in the general ALCMC requirements, are detailed in the SRP MNUC/BUC addendums to this capability set. One note: The assumption with this set of ALCMC requirements assumes course development and update requirements are found in the ATDC requirement set.

EASS

SRP Portfolio of Products are accessed via the SRP SharePoint Portal known as the SRPWeb Portal (SRPP). This portal is the gateway to all things SRP including the complete product suite, as well as valued web content servicing the complete world-wide SRP community. The SRPP also includes the SRP Enterprise Data Warehouse. SRP developed an Enterprise Data Strategy focused on standardization of enterprise data, including the use of authoritative data sources and standard data access methods. The SRP Enterprise Data Warehouse (EDW) is the primary product of that strategy – it serves as a central repository of SRP common data and the data services that deliver authoritative data to applications. Again, this can be found visually depicted in the SRP portfolio of products "circle of life" diagram provided earlier in this appendix.

The SRPP requirements for a portal/gateway and all that is contained within were first detailed within the EASS capability set. While the desire is to now incorporate most into the TRMC capability set, the SRP MNUC/BUC addendums containing much of the detailed requirements are still found within the EASS artifacts and are highlighted below:

- Provide and maintain the following Enterprise Applications (Tools)
  - SRPWeb Portal (APMS AITR#: DA06014 / DITPR#: 3921): (SRPWeb Portal,
  - Army Range Requirements Model (ARRM),
  - Range Complex Master Plan Tool (RCMPT), Range Configuration Control Board (RCCBWeb),
  - MILCON Dashboard and associated Project Lists and UFR lists
  - Enterprise Data Warehouse (EDW), Prof Dev Mgmt Tool
  - Range Facility Management Support System (RFMSS) (APMS AITR#: DA00249 / DITPR#: 3827);

- Provide and Manage SRP Help Desk services

- Provide SRP Portfolio Product User Permissions Management
- Manage SRP System Interface Requirement / Agreement
    - RFMSS – CSE
    - RFMSS - ASIP
    - RFMSS – RMTK
    - RFMSS – IRSS
    - RFMSS – FAA
    - RFMSS – USAF TSC
    - TSIMS – EDW
    - ITMMT – EDW
    - EDW – HQIIS
    - EDW - ISR
    - EDW – DAIS/RPAD (to-be)
    - EDW – AIA (to-be)
- Provide SRP Information Worldwide via an information content portal (SRPP)
    - SRPWeb Portal Customized Functionality
    - SRPWeb Portal Knowledge Centers
    - SRPWeb Portal Consolidated Announcements/Calendar
    - SRPWeb Portal Access to Applications from Menu tab
    - SRPWeb Portal Participants Database (PDB) Tool
    - SRPWeb Portal My Profile functionality
    - SRPWeb Portal Document Download History functionality
    - SRPWeb Portal Bulk Approval for Document Library Workflow functionality
    - SRPWeb Portal User Management Admin Management Tool

- Agile artifacts for some of the SRP EASS BUCs exist and can be supplied.

Capability Gaps

Current SRP Portfolio of Products Capability Gaps

- Automated access to Authoritative Data Sources
- Consistency of data element definition and content, i.e., if more than one system stores training facility data, ensure it is stored consistently across all systems.
- On-hand target mechanism inventory linked to the on-hand range inventory

Prioritization of gaps

- The gaps listed above are listed in priority order.

System Interdependencies

SRP Requirements for Other Data Consumption

- ADS data that governs reference data such as unit/training event names/descriptions (if different from what currently found in SRP products portfolio)
- Resource/Enabler request data from DTMS (for submission to RFMSS)

SRP Requirements for Data Production/Sharing

- Resource/Enabler confirmations/reservations
- Historical resource usage/utilization
- GIS data for unit schedule planning (via RTVS and the Future Date Tool in RFMSS)
- GIS-based safety danger zones (SDZ/WDZ/FDZ/PSDZ) from SRP GIS TK
- Contributions from SRP Enterprise Data Warehouse that might be required in the ATIS enterprise data warehouse/lake etc. for reporting or analysis purposes
    - Would include Installation-specific reference data not found in ADS sources due to the requirement to support non-Army/non-ASIP unit training (unless that data is not desired to be a part of the overall ATIS data capture).

**NOTE 1: There will probably be additions to the produce/consume lists necessary as the development and data architecture/framework plans for the new ATIS, as well as the plans for incorporating the legacy SRP GOTs applications into the new ATIS become more mature.

**NOTE 2: TPO ATIS team created a very thorough set of .ppt slides detailing all of the interfaces associated with the SRP Portfolio of Products. Those provide valuable information of what data is needed to be produced/consumed to meet the current interface requirements of the SRP applications. Those sets of. ppts should be included in this SRP packet submittal.

APPENDIX J: REQUIREMENTS LIST (BUSINESS USE CASES)

The table below contains ~181 requirements, which equate to the individual Business Use Cases or BUCs. Match the BUC identifier in the right table column to locate the full BUC extract. (The BUCs are pulled from ~74 Mission Needs Use Cases or MNUCs. See Appendix C above for additional details on MNUCs.)

The BUC documents contain a trigger and actor and decompose the goal into “Normal Flow” process steps. BUCs also contain an OV-6C business model that breaks out user roles and data/information exchanges. Additionally, the full list of laws, regulations and policy (LRP) are available in the BUCs. Some LRP listings are truncated below.

Note that any vendors seeking access to the BUC documents will need to contact the ATIS Product Manager (PdM). For stakeholders already integrated into the development effort see guidance in this CRD section five above.

ATIS Capability Areas = ALCMC - Army Learning Content Management, ATDC - Training Development, ATMC - Training Management, TESC - Scheduling, TRMC - Resource Management, EASS - Enterprise Architecture, Standards and Services.

Table 23: Requirements List (Business Use Cases)

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Provide Training / Instructional Material on Cloud Accessible Knowledge Site	Training SME develops, maintains and stores all training material on prescribed training knowledge repository.	DD Form 705 AR 40-501 AR 600-9 AR 140-1 …list truncated	ALCMC-3000: 2.1
Provide Training Support Reuse Library Configuration Management.	Training Developer supporting / working file knowledge repository. As files are developed and provided to army training managers, the files need to be stored electronically, configuration controlled and sharable to all training developers upon demand.	DA Pam 350-38 DA Form 581 DA Form 5514-R	ALCMC-3000: 2.2
Identify Self-Development Opportunities / CLP Accomplishments *draft*	Present the learner with a catalog of learning opportunities to prepare for career success and/or reports Continuing Learning Point (CLP) accomplishments.	AR 350-1 DA Form E581 SF 182	ALCMC-3001: 2.1
Manage Professional Development Career Map *draft*	Proponents provide Career Field (CF) roadmaps will leverage the Soldier and Civilian experiential information matched with specific certifications and educational information to identify the next logical career and professional progression. Like proponents, the Army Acquisition CF managers establish a "Back-to-Basic" Defense Acquisition Workforce Improvement Act (DAWIA) professional objectives roadmap to include Continuing Learning Point (CLP) triggers. These Professional Development Maps (PDM) provide the basis for Individual Development Plans (IDP) for Soldiers and Civilians.	AR 350-1 AR 690-950	ALCMC-3001: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Self - Managed Individual Development Plan (IDP) *draft*	The Army Career Field (CF) member (Military and DoD Civilian) leverages a Professional Development Model (PDM) roadmap to identify a catalog of learning opportunities to prepare for career success, the next level of responsibility or identify courses that enhance their professional knowledge. The individual will create an Individual Development Plan (IDP) with targeted learning objectives compliant with Army guidance and their specified Occupational Specialty assignment.	AR 600-100 AR 600-81 DA Pam 600-25	ALCMC-3001: 2.3
Supervisor - Managed Individual Development Plan (IDP) *draft*	A supervisor, representing/assisting the Army Career Field (CF) member (Military and DoD Civilian) leverages a Professional Development Model (PDM) to identify a catalog of learning opportunities to prepare for career success or identify courses that enhance their professional knowledge. The supervisor (with the concurrence of the individual present) will create an Individual Development Plan (IDP) with targeted learning objectives compliant with Army and their specified Occupational Specialty assignment.	AR 600-100 AR 600-81 DA Pam 600-25	ALCMC-3001: 2.4
Identify Training Deficiency Solution using DOTMLPF Analysis	The needs analysis process is a systematic method for determining true TD / training requirements. It serves to control the creation of products, or elimination of education / training, that is either not required, or distracts from training the units and soldiers what is really needed. Needs analysis identifies performance shortfalls, and identifies training and non-training solutions to the shortfalls. The needs analysis enables identification of any gaps between desired and actual performance. That is, the delta between what exists now and what is required, or identifying capabilities required for meeting future contingencies that may result in changes in Doctrine, Organizations, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF).	AR 350-1 TRADOC PAM 350-70-6 (Para 5) TR 350-70 Page 65 Para 6-13 TRADOC Reg 350-70, para 6-13, page 65) JA 350-70-6.4 Job Analysis Checklist …list truncated	ATDC-4000: 2.1
Conduct Mission Analysis	This process may identify the requirement to revise an existing mission analysis or conduct a completely new one. Apply managerial judgment when conducting a mission analysis. Follow all the procedures listed for an initial mission analysis effort. Since most mission analysis actions are revision actions, it may not require all of these steps. Do what is required to identify valid missions and critical collective tasks.	AR 350-1	ATDC-4003: 2.1
Validate Collective and Supporting Tasks	The first step in accomplishing this is the identification of the critical collective tasks when conducting mission analysis. The second, and just as vital, step is to decompose (analyze) each identified collective critical task and identify the details and other factors that affect how that task is performed.	AR 350-1, appendix G CJCSM 3500.03 AR 350-1 JA 350-70-6.1 …list truncated	ATDC-4004: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Identify Valid Individual Critical Task / or Group of Tasks For a Specific Job or entire MOS/AOC	To ensure that the Army is providing the right education / training to the Soldiers, conduct a new or update an existing job analysis before the development of individual education / training products.	TR 11-21 TRADOC PAM 350-70-6 AR 350-1 …list truncated	ATDC-4005: 2.1
Identify valid Individual Critical Learning Requirements (CLR) / or group of CLRs for a specific job or entire MOS/AOC.	To ensure that the Army is providing the right education/training to the Soldiers, conduct a new or update an existing job analysis before the development of individual education/training products.	AR 350-1, dtd 18 Dec 2009 TRADOC PAM 350-70-6 (Para 5) TR 350-70 Page 65 …list truncated	ATDC-4005: 2.2
Validate Identified Individual Task Skills	When performing individual task analysis, remember that task proponents shall conduct a task analysis for critical individual tasks only, not noncritical tasks, to ensure accomplishment of wartime missions, essential collective tasks, and the full range of military operations.	AR 350-1 TRADOC PAM 350-70-6 page 115-117 JA 350-70-6.1 …list truncated	ATDC-4006: 2.1
Validate Identified CLR Skills, Knowledge and Attributes	When performing Critical Learning Requirements (CLR) analysis, remember that analysis team shall develop analysis for critical learning objectives only, not noncritical objectives to ensure accomplishment of the job/mission.	AR 10-5-7 TP 350-70-4 TRADOC Reg 350-32 …list truncated	ATDC-4006: 2.2
Develop Combined Arms Training Strategies (CATS)	Develop CATS, Staff for Approval (Proponent).	AR 10-5-7 TRADOC Reg 350-32 TRADOC Reg 10-5-7 …list truncated	ATDC-4008: 2.1
Design Collective Training Products	Establish and manage Collective products as a result of analysis.	AR 350-1 JA 350-70-7.1 …list truncated	ATDC-4009: 2.1
Develop / Design Individual Learning to Address Performance Deficiency	Training Developer designs Individual Learning to solve an identified performance deficiency. SME develops/validate Course sequence with user input.	TRADOC Pam 350-70-6 AR 350-1 TR 350-70 TP 350-70-14	ATDC-4010: 2.1
Identify Training Resources / Enablers Required	TD identifies requirements for Enablers (TADSS/Facilities/Personnel/etc.) to support Training as required.	AR 350-1 TR 350-70 Page 65 …list truncated	ATDC-4010: 2.2
Create / Modify Existing Ammunition Strategies	Proponent/CoE reviews lessons learned, strategies, and higher headquarters (HHQ) guidance to determine training ammunition requirements. A gap is identified in combat requirement(s). Compares and reconciles to authorization and historical usage.	DA Pam 350-38 TRADOC Pam 350-70-6 AR 350-1 JA 350-70-6.1	ATDC-4011: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Obtain Learning Courseware Approval	Training POC identifies approving official for training document and distributes document for approval.	TR 350-70 AR350-1	ATDC-4012: 2.1
Develops / Staffs Collective Training Product	Develops Collective training including coordination with associated supporting actors for input prior to finalizing and submitting for approval.	TR 350-70 TP 350-70-1 AR 350-1 FM 5-19	ATDC-4013: 2.1
Develops / Staffs Supporting Drill(s)	Supporting drills are those that are performed during the execution of the supported collective task. Drills must be applicable to the majority of the population. This guidance applies at both the task and performance step levels.	TP 350-70-6 AR 350-1 TRADOC Reg 350-70 …list truncated	ATDC-4013: 2.2
Develop / Staff Individual Training Course / Lesson	Develops Individual training lessons including coordination with associated supporting actors for input prior to finalizing and submitting for approval. Developer determines what must be taught and how the content can be taught effectively with the available resources; identify the lesson components; lesson content outline is converted into an actual lesson plan; planning components required to teach the course.	AR 350-1, dtd 18 Dec 2009 TP350-70-7 & TP350-70-10 TP 350-70-7 …list truncated	ATDC-4014: 2.1
Develop / Staff Distributed Learning (DL) Course / Lesson	Develops Individual Distributive Learning (DL) training lessons including coordination with associated supporting actors for input prior to finalizing and submitting for approval.	SCORM 204 3rd Ed TP 350-70-10 TP 350-70-12 TP350-70-7 …list truncated	ATDC-4014: 2.2
Provide DL IMI Courseware Authoring Tool / Manage DL IMI Content Assets	This capability provides automated Distributive Learning (DL) Interactive Multimedia Instruction (IMI) courseware development and reuse of IMI asset media content (including creating, import/export, managing, searching, organizing, and publishing) for level of interactivity 0 and 1 efforts. This includes stand-alone specialized requirements as well as institutional and individual domains. (Efforts rated level 2 through 4 follows BUC 2.2)	TR Reg 350-18 TR Reg 350-70 TRADOC Pam 350-70-12, 3 May 2013 TRADOC Pam 350-70-14, 27 March 2015	ATDC-4014: 2.3
Identify Training Replication Requirements	Replication requirements and specifications are available.	TR 11-21 TP 350-70-4 TR 350-18 …list truncated	ATDC-4015: 2.1
Identify Resource / Enabler Requirements	Identify Training Resource / enabler requirements for support of identified training events.	TR 11-21 TP 350-70-4 TR 350-18 …list truncated	ATDC-4017: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Process, Validate & Resource Enabler Requirements	Reviews Training Enablers to support Training / Education Documents / training requirements analysis system (TRAS) / Lesson Plan and program management review (PMR) meetings to help TSS program leads and management decision evaluation package managers to refine and develop an in depth understanding of program requirements so that they can successfully defend the requirements during management decision evaluation package briefings.	AR 350-1 (Chapter 5)	ATDC-4017: 2.2
Delivers Identified Training Enabler / Resource	TSS requirements generated from Army initiatives / senior leader guidance or Program managers are deliberate in support of normal programming cycles.	AR 350-1 (Chapter 5) TP 350-70-10 TP 350-70-7 …list truncated	ATDC-4017: 2.3
Evaluate Training	Observes / Surveys selected course / courseware to validate retention an ability to execute task / outcome. Evaluations assess the quality of training and TD. Evaluators conduct evaluations by analyzing the current status of unit and individual performance, training products, programs, and processes by using a 5-phased process (planning, collecting data, data analysis, providing recommendations / reporting of findings and following up on recommendations to ensure implementation). This process produces valid and reliable results that identify training deficiencies. Findings provide the basis for corrective recommendations through the chain of command. Findings also identify those areas of the training program performing efficiently and effectively.	TR 11-21 TP 350-70-4 TR 350-18 AR 350-1 JA 350-70-4.3a JA 350-70-4.3b …list truncated	ATDC-4018: 2.1
Incorporate Lessons Learned into Courseware	The lessons learned process (LLP) is a deliberate and systematic process for collecting and analyzing field data and disseminating, integrating, and archiving observations, insights, and lessons collected from Army operations and training events. Information gathering will be integrated into DOTMLPF, research (industry and academia), development, acquisition, and planning activities in order to sustain, enhance, and increase the Army's preparedness to conduct current and future operations. The process is solution–oriented. It is designed to support organizations at all levels of command and staff and can be adapted for use in all operations, to include combat, training, maintenance, installation support, experiments, and equipment fielding. Figure 4–1 graphically depicts the deliberate LLP. Observations, insights, and lessons do not constitute lessons learned without changing individual, unit, or Army behavior, which is accomplished through the application of the LLP.	TR 11-21 AR 11-33 AR 350-1	ATDC-4019: 2.1
Design the Evaluation Tool	Designs the Evaluation tool as part of the evaluation plan. Define method/tool type / identifies the trigger for execution.	TR 11-21 AR 350-1 Job Aid 350-70-4.4a …list truncated	ATDC-4020: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Develop Interviewing Practices / Procedures	Refine interviewing practices and procedures to ensure target data is collected.	TR 11-21 AR 350-1 Job Aid 350-70-4.4a …list truncated	ATDC-4020: 2.2
Determining Sampling Size	Determining the Sampling size is not trivial, because the results from the sampling may contain a bias and lead to erroneous conclusions about the population. When equal chances cannot be assured, tell the reader so, and note those omissions when writing the analysis.	TR 11-21 AR 350-1 Job Aid 350-70-4.4a …list truncated	ATDC-4020: 2.3
Conduct Self-Assessment	Training institutions conduct self-assessments to ensure standards established by HQ TRADOC have been met. The self-assessment process is based on the Accreditation Standards and Guide established by HQ TRADOC.	AR 350-1 TRADOC Reg 350-18 FM 7-0 Job Aid 350-70-4.10a …list truncated	ATDC-4021: 2.1
Execute Accreditation / Assessment	Accreditation is a QA Program function that helps to ensure the command that the CoE or learning institution's DOTMLPF domains enable the institution to develop Soldiers and leaders with the competency needs of today's Army. It focuses the commander's attention on the state of the institution's on-going programs and processes across its DOTMLPF domains as measured against TRADOC-approved Army Enterprise Accreditation Standards (AEAS). It is a forcing function to implement new Army initiatives. Accreditation of Army CoEs and learning institutions will be conducted using the AEAS. Accreditation of all AC and RC training institutions are reevaluated every 3 years (currently 6 years for CGSC and AWC).	AR 350-1 TRADOC PAM 350-70-6 (Para 5) TR 350-70 Page 65 Para 6-13 TRADOC Reg 350-70 JA 350-70-6.4 Job Aid …list truncated	ATDC-4021: 2.2
Conduct Internal Evaluation	The purpose of an internal evaluation is to improve the quality and effectiveness of the instructional system, by providing sufficient, high-quality data to decision makers upon which they can make sound, informed decisions about the training and education. Internal evaluation is a deeper requirement than checking instructor techniques and method of instruction. It is a check of the quality of the content in regards to what is being taught, and what the students are assimilating. In an internal evaluation, make a comparison between the course objectives and standards applied in the training environment, and the objectives and standards specified in course development documents.	AR 350-1, dtd 18 Dec 2009 TRADOC PAM 350-70-6 (Para 5) TR 350-70 TRADOC Reg 350-70, para 6-13, page 65) JA 350-70-6.4 Job …list truncated	ATDC-4022: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Conduct External Evaluation	External evaluation determines if soldiers can meet job performance requirements, need all the instruction they received, or need any additional instruction they did not receive. This process gathers data from the field to assess graduate's on-the-job performance in a job environment, and assess if the soldier can satisfy real-world job performance requirements. Evaluators must realize that the responses to the surveys are opinions of supervisors/soldiers in a specific unit configuration that may or may not relate to wartime or battlefield requirements, and may or may not be in a peacetime environment. Likewise, it is important to compare what the field says is being done with regard to a particular task, with what other documentation indicates should be done to support a particular unit mission, and/or equipment configuration, or operations capability.	AR 350-1	ATDC-4022: 2.2
Conduct Training Effectiveness Analysis (TEA)	Conduct, predict or evaluate the efficiency and effectiveness of TRADOC training systems, strategies, programs, and products (TR 350-32, page 2 chapter 2).	TR 350-70 AR 350-1 FM 7-0 …list truncated	ATDC-4022: 2.3
Evaluate Selected System Using PFTEA Approach	Identify the requirement for a post fielding training effectiveness Analysis (PFTEA), develop the study directive, and issue the directive to user-identified organizations/ personnel. Staff and distribute PFTEA's results for approval. (TR 350-32, para 3-6)	TR 350-32, para 3-6 TR 350-70 TP 350-70-4 …list truncated	ATDC-4022: 2.4
Evaluate Fielded System TSP Training Effectiveness	System users/operators to provide feedback on the effectiveness of a system's TSP (AR 5-5).	AR 5-5 TR 350-70 TP 350-70-4 …list truncated	ATDC-4022: 2.5
Identify / Distribute Best Practices or Trend.	Identify and share accreditation trends and "Best Practice" across all Army learning institutions.	AR 350-1 FM 7-0 TP 350-70-6	ATDC-4024: 2.1
Army Readiness is Enhanced by Training Provided.	QAO functions as an integral part of the Army Team by providing decision makers and stakeholders' feedback and guidance to ensure Army learning institution DOTMLPF-P domains effect quality doctrine, education, learning and training to ensure Army readiness.	TR11-21 AR 350-1, apx G CJCSM 3500.03	ATDC-4025: 2.1
Validate Accreditation Standards	Accreditation is a QA Program function that helps to ensure the command that the CoE or learning institution's DOTMLPF domains enable the institution to develop Soldiers and leaders with the competency needs of today's Army. It focuses the commander's attention on the state of the institution's on-going programs and processes across its DOTMLPF domains as measured against TRADOC-approved Army accreditation standards. It is a forcing function to implement new Army initiatives. Accreditation of Army CoEs and learning institutions will be conducted using the Army Enterprise Accreditation Standards (AEAS).	AR 350-52 TP 350-70-9 TR11-21, "TRADOC Implementation of the Army Quality Assurance Program" AR 350-1 (Para 3-5)	ATDC-4025: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Manage Organizational Training Competencies	Provide the capability to view all aspects of Unit Organizational Competencies.	AR 350-1 FM 7-0	ATMC-2000: 2.1
Manage Unit Training	This process provides the capability to plan unit training to address identified strength and weaknesses.	AR 350-1	ATMC-2000: 2.2
Develop Leaders for Future Requirements	Provide opportunities for Leaders to mentor and conduct professional development of subordinates and for leaders to participate in professional development activities with peers and subordinates.	TR 350-70 TP 350-70-1	ATMC-2000: 2.3
Maintain Professional Development	Leaders and HR managers use ITR personnel records, School Status, Certifications to move personnel and if needed send personnel to requisite school enroute to new position or TDY and Return.	TP 350-70-1 TP 350-70-3 TP 350-70-4 …list truncated	ATMC-2000: 2.4
Maintain The Army Guard Training System (TARGTS) Capability	ARNG Leaders and Commanders use the TARGTS modules to develop Training Day Sets (TDS) Annual Training (AT) Plans for processing through their chain-of-command to their State Leadership and the National Guard Bureau (NGB). Once approved the plans are integrated into the ATIS.	2018 02 28 ATMS-ATIS Discussion TARGTS PDF	ATMC-2000: 2.5
Maintain Army Reserve Training and Tracking System (ARTATS) Capability	USAR (Compo 3) Unit Commanders use the Army Reserve Training and Tracking System (ARTATS) to display their unit dashboard (Command selected metrics); manage and validate their Annual Training (AT) plans; manage their company Battle Assembly (BA) Plan; Manage (CRUD) the Commander's Dialogue (CD) entries; Create ARTATS Reports; and manage Admin Modules: UIC-METL alignment; Personnel Augmentation and Display Archived Data (Trend & Cost Analysis).	20180204 ARTATS Overview - USARC ARTATS DTMS User Guide v7.19.2 dtd 14 May 2019 FM 7-1; ADRP 7-1	ATMC-2000: 2.6
Manage Individual Learning	Individuals are ultimately responsible to manage their own level of knowledge / awareness or applying specific skills. Management of the individual's learning includes daily accountability, course schedules, knowledge management, assessment, counseling and assessing/documenting that the goal skill set has been achieved.	EXORD XXX-15 ADRP 7.0 FM 7-0	ATMC-2001: 2.1
Determine Eligibility for Learning Event	This process provides the capability to determine eligibility for enrollment in an education course, making a decision on enrollment, and enrolling a student in an education course.	TP 350-70-1 AR 350-1 TR PAM 350-70-6 …list truncated	ATMC-2002: 2.1
Management of Learning Products	This activity is focused on defining and implementing a process where finished or end products, that have been approved by an proponent commander or accrediting authority defined approval process, are automatically published to a content delivery scheme for distribution needs.	TR 350-70 TP 350-70-1 (Training Development)	ATMC-2003: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Manage Asynchronous (no instructor) non-Resident Education / Training Programs	Army DL–producing activity has the goal to train/educate individuals to achieve a level of knowledge / awareness or applying specific skills. Management of nonresident training includes course schedules, knowledge management, assessment, and assessing/documenting that the goal skill set has been achieved.	TRADOC PAM 350-70-6 TP 3570-70-12 TR 350-70 Page 65 Para 6-13	ATMC-2004: 2.1
Manage Learner Records	Manage Learner records involves everything relating to capturing, recording and archiving a learner's accomplishments at a proponent school or Military Educational Organization. These data points may include symptoms that prevent successful completion of the learning event / training activity. These learner record activities are generally associated with the actor Registrar if assigned to the learning institution.	TRADOC Pam 350-70-6 AR 350-1, Apx B, TR 350-70 Page 65 …list truncated	ATMC-2005: 2.1
Validate / Update ITR Data	Training Record POC validates/Updates personnel data; school certificates, awards, weapons, height/weight, APFT, NBC, Dependent Support Plans, Mandatory Annual Training requirements and Position certification requirements if any. MOS / Additional Duty tasks may require credentialing data input. Includes documenting any Credentialing, Education, Certification, Licensing (CECL) achieved as well as identification of their commercial equivalents.	AR 350-1 DA Form 87; DA 705 DA Form 3349 DA Form 5500/1 ITP AR 350-1	ATMC-2008: 2.1
Gain Occupational Knowledge / Qualification for Promotion	Identifies a self-development course(s) to gain promotion points and/or occupational knowledge leading to professional advancement.	TR 350-70, TP 350-70-14	ATMC-2008: 2.2
Identify Future Training Events	Reviews ITR to identify and project individual training events such as NBC, Weapons, Height/Weight and APFT etc. ensuring unit compliance meets Command goals and validate short- and long-range training schedule.	AR 350-1 TP 350-70-4 chap 5	ATMC-2008: 2.3
Identify Training Approval POC	This business capability is for the unit training POC to identify approval POCs for training schedules and training plans.	TR 350-70 TP 350-70-1	ATMC-2009: 2.1
Approve Unit Planning Guidance	This process defines a unit training plan approval process.	AR 350-1 AR 11-33 FM 7-1	ATMC-2009: 2.2
Calculate Training Enabler / Resource Requirements	Using training guidance, CATS / METL / POI Planning data, calculate each category of resources required to successfully execute the training event(s).	FM 7-0 para 3-9 TP 350-70-10 …list truncated	ATMC-2010: 2.1
Conduct Instruction / Training Preparations	This activity focuses on the processes required to prepare to instruct a training event.	AR 350-1	ATMC-2015: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Create Training Risk Assessment	This activity focuses on the processes required to prepare a risk assessment on training event.	TR 350-70, TP 350-70-14	ATMC-2015: 2.2
Develop AAR Plan	This activity focuses on the processes required to prepare an AAR on a training event.	DD Form 705 AR 40-501 …list truncated	ATMC-2015: 2.3
Implement Unit Training	Provides the capability to implement training identified as required during training planning, and to record training results.	AR 350-1 ADP 7-0 ADRP 7-0	ATMC-2016: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Monitor Range / Training Area Execution	The Text Fire Desk allows authorized users to track and manage training activities at an installation's airspaces and ranges. Data is displayed in a tabular format. Display Status Color Coding, the background color of the rows in the Fire Desk grid indicates the operations status of the activity: Blue Unit has not checked in for reservation, OR Unit has checked in (when check-in is required) but has not occupied the facility; Green Occupied non-firing or maintenance activity; Yellow Cease-fire (firing but currently cold); Red Firing (hot); White Scheduled maintenance activity, Departed unit, No show, OR Cancellation. Two Displays: Short Display and Long Display. The short display is an abbreviated grid that shows only the following three columns for an activity: Facility/Airspace Subdivision which is the Facility or airspace subdivision of the activity; Unit which is the Activity's unit; Status which is the Operations status of the activity. The short display is the default display when you log on to the Fire Desk except when the System Administrator has set the Long Display as the default. The long display shows the following by default for an activity: Facility/Airspace Subdivision which is the Facility or airspace subdivision of the activity; Unit which is the Activity's unit; Status which is the Operations status of the activity; Event Start Time; Event End Time; DODIC; Maximum Firing Altitude (MSL Ft.) which is the maximum altitude that the activity will be firing, for ground activities, this is the sum of Safety Factor, the Facility Altitude, and the greater of the Maximum Ordinate or Vertical Hazard, for air activities, this is the sum of the Safety Factor, the Impact Area Altitude, and the greater of the Ordnance Apex or Vertical Hazard; SDZ (or WDZ) [available only when SDZ/WDZ workflow is enabled] which is the SDZ or WDZ being used for the activity. You can also select any of the following fields from the Field Chooser to display on the Fire Desk: Event Name, RCNI, Minimum Altitude, Maximum Altitude, Mission Number, Number of People, Vertical Hazard, Weapon, Continuous, Any user-defined fields from the Request form. The Fire Desk grid can display activity times in local or Zulu time (Local time display is the default). As a default, the status of all facilities, incidents, downrange activities, temporary firing points, and activated/deactivated airspaces are synchronized among all open Fire Desks. If you want to turn off this feature, click the Do Not Refresh Automatically so that a check appears in the check box. Filtering and sorting features allow a user-defined customized view. Fire Desk notification buttons alert you to any activity updates that require your attention. If there is an activity that requires your attention, the button will change from grayed-out to colored (e.g., red, yellow). Training operations are functions that help you process and record information for activities on the Fire Desk, including: Check In, Status Change, Training Information (Utilization), Request, Downrange, Incident, Commo Check, No Show, Temporary Firing Points (Temp FP), Facility Info, and Reset. Menu actions are functions that you can perform as the Fire Desk Operator: New Same Day Request; Activate/Deactivate Airspaces; View Logs; End of Day Processing; Authorize OICs for OIC Fire Desk (when OIC Fire Desk is enabled); OIC Log (when OIC Fire Desk is enabled), and SOFA (when OIC Fire Desk is enabled). The Fire Desk Graphics Mode (called "Enhanced Graphics Fire Desk" or EGFD) uses Geographic Information System (GIS) technology to update and display geographical information about the status of the installation's facilities. Among many other features, Surface Danger Zones (SDZs) and Weapon Danger Zones (WDZs) will be uploaded from an export of Range Managers Toolkit (RMTK) and the new Enhanced GFD (EGFD) will display the appropriate SDZs/WDZs in real time to provide an accurate depiction of safe and unsafe areas on the range. There are session-level layer preference settings: Showing and Hiding Layers; reorder the Operational layers; change the background layer; Toggling Operational Layer Labels; Adjusting Layer Transparency. Additionally, all the same training options menu options are available in the graphics mode as are available in the text mode, as well as options specific to managing graphic depictions of each menu option.	36 documents posted in ATIS-SRP Knowledge center; AR350-19, dtd 30Aug2005, para 4-5 (c) (2), page 31; AR350-38, dtd 13Apr2013, para 2-18 (n) (2), page 21; AR385-63 / MCO3570.1C Range Safety dtd 29Feb2012, para 1-9 (a)(14), page 6	ATMC-2016: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Manage Assigned Personnel Learning / Training Portfolio	Unit leaders have the responsibility to train/educate individuals to gain a level of knowledge / awareness or applying specific mission; individual skills and prepare individuals for higher levels of responsibility. Management of the individual's training includes daily accountability, course / training schedules, knowledge management, assessment, counseling and assessing / documenting that the goal skill set has been achieved.	AR 350-1, Appendix B TR Pam 350-70-6 JA 350-70-6.2 Papers Supporting SAT	ATMC-2017: 2.1
Manage Assigned Personnel Army / Military Accountability	Manage Army / DoD / Legal recurring individual training requirements not included in institutional, self or operational domains.	AR 350-1, Appendix B TR Pam 350-70-6 JA 350-70-6.2 …list truncated	ATMC-2017: 2.2
Document Learning Event Outcome	This activity also includes teaching learner training course material, recording all learner course attendance to determine if they receive credit or not for the individual training course and issuing certificates and/or awarding competencies for successful completion of the course / courseware.	AR 350-1	ATMC-2018: 2.1
Manage Resident Learning / Training	Total Army School System (TASS) battalions / Military Colleges have the goal to train/educate individuals to achieve a level of knowledge / awareness or applying specific skills. Management of the resident learning includes daily accountability, course schedules, knowledge management, assessment, counseling and evaluation / documenting that the goal skill set has been achieved.	TR 11-21 TP 350-70-4 TR 350-18 AR 350-1 JA 350-70-4.3a …list truncated	ATMC-2019: 2.1
Manage Student Army / Military Accountability	Manage Army / DoD / Legal recurring training requirements not included in educational program.	TR 350-70, TP 350-70-14	ATMC-2019: 2.2
Manage DoD/Army Recurring Training	These activities includes the management and documented training events required by law, DoD, the US Army or Local Installation guidance and not included in the resident training courseware.	AR 11-33 AR 350-1	ATMC-2019: 2.3
Provide / Manage ROPD Program	Manage training and education of individuals to achieve a level of knowledge / awareness or applying specific skills. Management of the ROPD program includes enrollment, funding, course offering, knowledge management, assessment, counseling and evaluation / documenting that the goal skill set has been achieved. If Learner desires a DL course, a link is provided to jump to the LMS DL enrollment process. Registration and course progress is reflected in ROPD.	29 documents posted in ATIS-SRP Knowledge center; AR350-19 Army TPO-L - USMC RTAM MOU dated 7 Feb 2012	ATMC-2019: 2.4
Implement Instructor Facilitated non-Resident Education / Training	Military Education school has the goal to train/educate individuals to achieve a level of knowledge / awareness or applying specific skills. Management of the instructor facilitated non-resident education training includes course schedules, knowledge management, assessment, counseling and assessing/documenting that the goal skill set has been achieved.	TP 350-70-1 TP 350-70-3 TP 350-70-4 TP 350-70-5 …list truncated	ATMC-2020: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Manage Resident Educational Program	Military Colleges have the goal to educate individuals to achieve a level of knowledge / awareness and may confer a Bachelor or Master Degree upon completion. Management of the education program includes daily accountability, course schedules, knowledge management, assessment, counseling and assessing/documenting that the accredited program course hours are achieved.	AR 350-1	ATMC-2021: 2.1
Observe Performance	Assess leadership skills, subject knowledge, professional abilities, and military behaviors.	AR 350-1 TP 350-70-1 FM 7-0	ATMC-2022: 2.1
Plan Development Opportunities	Ensure subordinates undergo experiences that enhance their skills, knowledge, abilities, and behaviors; prepare them for success; improve their adaptability; and prepare them for future responsibilities. Obtain honest informal and formal feedback. Identify ways to sustain and improve leader skills, knowledge, abilities, and behaviors as often as needed.	TP 350-70-4 FM 7-0	ATMC-2022: 2.2
Recommend and Support Professional Military Education	Ensure their subordinates attend professional education courses at the right time in their careers and functional training to make them effective leaders in assignments of higher responsibility.	AR 350-1	ATMC-2022: 2.3
Provide Course Closeout Checklist	POC given appropriate forms for accounting for soldiers, cleaning up the training area, maintaining equipment (preventive maintenance checks and services), turning in/accounting for equipment and supplies, inspections, and recording evaluations and assessments results.	TP 350-70-10 TP 350-70-7 TR 350-70 JA 350-70-5.3 …list truncated	ATMC-2023: 2.1
Provide Unit Command Assessment for Collective & Individual Tasks	Unit Command completes unit assessment for supporting collective events.	AR 611-5 TP 350-70-5 TP 350-70-7 TP 350-70-3	ATMC-2023: 2.2
Provide Performance Improvement Feedback	Instructor / Facilitator collects data from item analysis and provides input to course manager. Course manager collects item analysis and survey data, and provides to training developer.	TP 350-70-10 TP 350-70-7 TR 350-70 JA 350-70-5.3 …list truncated	ATMC-2023: 2.3
Gather Event Planning Documents and Perform Analysis	Reviews expected results with actual results comparing with historical data for analysis.	AR 11-33 AR 350-1 apx G CJCSM 3500.03	ATMC-2024: 2.1
Develop and Execute AAR	Integrates Training Events are captured in an AAR document(s) to record training event activities.	AR 11-33 ADRP 7.0 FM 7-0	ATMC-2024: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Develop and Staff Lessons Learned	Develops and Staffs Lessons Learned package for distribution.	AR 11-33 ADRP 7.0 FM 7-0	ATMC-2024: 2.3
Assess Unit METL and Training Status	Unit CDR reviews Unit METL by task to include last time trained and percent of current unit assignment present during training with all evaluation and observation reports.	ADRP 7.0 TP 350-70-10 TP 350-70-7 …list truncated	ATMC-2025: 2.1
Assess Leadership Training and Duty Skills	Unit CDR speaks to unit leaders (officer and NCO) to get their informal task evaluations of current state of training (collective and individual).	AR 611-5 TP 350-70-5 TP 3570-70-7 TP 350-70-3	ATMC-2025: 2.2
Assess and Comment on Unit Training Status	Commander input their assessment with comments on improving ratings if appropriate.	AR 350-1 DA Form 87 …list truncated	ATMC-2025: 2.3
Provide Training Common Operating Picture (COP)	Provide a COP that presents training and education information and products necessary to support readiness to meet emerging threats. Provide a COP that displays an arrangement of the operational, institutional and self-development training status, training systems, processes, facilities and equipment that enable them to conduct their mission. The COP capability enables Commanders, Leaders, Soldiers, and DoD Civilians to better understand, visualize, describe, direct, lead, and assess training requirements so they can more effectively plan, prepare, execute, and assess training.	TP 350-70-10 TP 350-70-7 TR 350-70 JA 350-70-5.3 …list truncated	ATMC-2025: 2.4
Approve Recommendations to Improve Training Courses	Training Evaluator gathers and analyzes instructor AAR and student evaluations of individual training courses after completion of each course for perceived short falls / requirements adjustments and proposed modifications.	EXORD XXX-15 ADRP 7.0 FM 7-0 TP 350-70-4 chap 5	ATMC-2026: 2.1
Determine if Course Implementation Met Course Objectives	Study of the Resident and Non-Resident training to include instructor interaction, lesson scheduling, facilities availability and usage, logistics, test administration, capabilities of graduates, usefulness and currency of training materials, and the determination as to whether the training meets design objectives.	TP 350-70-4 chap 5 DD Form 705 AR 40-501 AR 600-9 …list truncated	ATMC-2026: 2.2
Improve Courseware Through End-of-Course Evaluations	Completion of Educational Courseware / POI delivery instructors and students complete a course evaluation.	DD Form 705 AR 40-501 AR 600-9 …list truncated	ATMC-2027: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Manage (CRUD) the ATIS System Interface Services (SIS)	The ATIS System Interface Services (SIS) includes a metadata registry that serves as the gateway for accessing common Army Training Environment (TE) data elements, a data warehouse that provides a central repository of TE common data, and the data services that retrieve data from authoritative data sources. The SIS Data Warehouse provides a central repository of TE authoritative data that provides a level of abstraction from the source database, is scalable, auditable, and requires fewer interface agreements between systems. The metadata registry provides the mechanism for directing users to the appropriate access method for obtaining authoritative data. Data elements are accessed from the data warehouse via web services. Where appropriate, multiple access methods are available for exposing each individual data element.	RESTFul Description Documents RESTFul Development Guidance Design Development REST	EASS-6000: 2.1
Manage SRP System Interface Requirement / Agreement(s)	The SRP Enterprise Data Strategy provides a set of strategies to ensure a consistent view and definition of information across the SRP enterprise and enable SRP systems to interface with external systems more efficiently. One of the strategies is to establish and implement a standard approach for securely accessing and exchanging authoritative data. Interface agreements ensure the availability, stability, and performance of provisioning services within specified constraints.	4 documents posted in ATIS-SRP Knowledge center	EASS-6000: 2.2
Provide ATIS Information Worldwide	One of the underlying tenets of ATIS is Information excellence to ensure that the Army has the best available training information and science to support the operational, environmental, and infrastructure characteristics of all available learning assets. ATIS supports Army users worldwide (military and civilian) in all training domains. This requires a single point of entry through a common interface to information and applications, which supports users in maximizing the capability, availability, and accessibility to learning services and resources (educational and training focused) to support doctrinal training and qualification requirements. Provide a customizable User Homepage / Landing Page. The Portal will provide a user customizable icon based personal homescreen/landing page. The personal homescreen/landing page settings shall be exportable and sharable from one user to another. Receiving user must by able to import and save the shared homescreen/landing page settings.		EASS-6001: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Provide SRP Information Worldwide	One of the underlying tenets of SRP is Information excellence to ensure that the Army has the best available data and science to support the operational, environmental, and infrastructure characteristics of its ranges and training land assets. SRP supports installation users worldwide. Information, applications, and training for SRP functional areas must be available and accessible to all SRP users. This requires a single point of entry through a common interface to information and applications, which support the SRP in maximizing the capability, availability, and accessibility of ranges and training lands to support doctrinal training and qualification requirements, mobilization, and deployments.	24 documents posted in ATIS-SRP Knowledge center; AR 350-19 dtd 30 Aug 2005, para 1-5, p 1; SRPweb documents	EASS-6001: 2.2
Provide ATIS Enterprise Help Services	A central Help Services provides support to all Army Compo users of the deployed ATIS system of systems solution. The approach is a community of help services to provide a state-of-the-art learning center so ATIS users can navigate and implement the full capability and functionality of ATIS.	ATIA Requirements	EASS-6002: 2.1
Provide SRP Help Desk Services	A central Help Desk provides support to user of all of the SRP Enterprise applications. A centralized Help Desk and Change Management software (BMC FootPrints v11.6) was implemented to track SRP incidents, access requests, and change requests.	2 documents posted in ATIS-SRP Knowledge center; SRP Help Desk SOP; BMC Footprint docs	EASS-6002: 2.2
Provide Self-Help Services	A self-Help Services provides support to all Army Compo users of the deployed ATIS system of systems solution. The approach is a community of help services to provide a state-of-the-art learning center so ATIS users can navigate and implement the full capability and functionality of ATIS.		EASS-6002: 2.3
Provide ATIS Learning Portal	This activity focuses on the capability to distribute Army Training Information System (ATIS) information worldwide. One of the underlying tenets of ATIS is Information excellence to ensure that the Army has the best available data and science to support the operational, environmental, and infrastructure characteristics of its ranges and training land assets. ATIS supports installation users worldwide. ATIS information, applications, and training for functional areas must be available and accessible to all Army users. This requires a single point of entry through a common interface to information and applications, which support the maximizing the capability, availability, and accessibility of learning and training supporting doctrinal training, qualification requirements, mobilization, and deployments.	ATIA Requirements	EASS-6004: 2.1
Provide Portal Configuration / Administration	User Management Admin Management Tool (UM Admin Management Tool) is the custom functionality of that contains several features to automate user registration and centralize the application usage and privileges.	ATIA Requirements	EASS-6004: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Provide SRP Information Worldwide (User Management) New SRP Portal / IT Application User	User Management Admin Management Tool (UM Admin Management Tool) is the custom functionality of SRPWeb Portal that contains several features to automate user registration for SRPWeb, to centralize the SRP Enterprise User Management for FIs/Administrators to manage/view permissions for all SRP web applications (except RFMSS) and to allow Administrators and SRPWeb users to view their SRPWeb application usage and privileges. (see attached requirements document)	2 documents posted in ATIS-SRP Knowledge center; AR350-19 AR 385-63/MCO 3570.1C Range Safety dtd 29Feb2012, para 1-9 (a)(14), page 6	EASS-6004: 2.3
Maintain User Transaction Logs	Logs function lets you view activities dates, times, and utilization data for user activities that have occurred. Includes areas accessed, document downloads, and software download (including name and version).	2 documents posted in ATIS-SRP Knowledge center …list truncated	EASS-6004: 2.4
Manage ATIS SoS Reporting / Status	The process for providing user the capability to define displays and reports. Reporting can be standard, command directed or user (Ad Hoc) defined.	ATIA Requirements	EASS-6006: 2.1
Manage ATIS Application Gateway Services	The TRADOC Application Gateway (TAG), provides a single access point to Army approved mobile applications. The TAG can be accessed on your desktop computer, or on your mobile devices.	ATIA Requirements	EASS-6008: 2.1
Manage TRADOC Application Gateway (TAG) Development	Manage the mobile product development process and provide supporting information regarding this process and the Training and Doctrine Command (TRADOC) mobile learning initiative / mobile application (mApp). This approach includes all aspects of a mobile app's life, including analysis, design, development, implementation, evaluation, and maintenance. This document aims to provide Army schools, Centers of Excellence (CoE), and proponents with the information needed to implement this process.		EASS-6008: 2.2
Manage Application Tool CCB	The purpose of the SRP IT CCB is to ensure efficient and effective interoperable IT solutions are achieved to meet SRP mission priorities. The main functions of the IT CCB are to: a) ensure IT solutions are evaluated, developed, implemented, and used effectively to support SRP goals and business processes; b) provide centralized requirements management for the automated IT solutions supporting the SRP; c) Ensure IT solutions are synchronized, integrated, and standardized across the SRP program. This IT CCB uses a structured process to evaluate proposed changes to existing SRP IT solutions. The CCB reviews SRP solution requirements, performs impact analysis of proposed workplan changes, and identifies requirements endorsed by SRP as valid requirements that support the SRP IT Strategy and business process.	31 documents posted in ATIS-SRP Knowledge center; AR350-19, dtd 30Aug2005, para 2-2, b(3), page 15; SRPWeb Portal IT CCB page; SRP IT CCB Charter, 23 July 2013.	EASS-6009: 2.3

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Provide the Central Army Registry (CAR) Registry Service	Provide a single access point to Army training resources, (e.g., Field Manuals, Training Support Packages, Individual and Collective Tasks, Drills, POI Courseware). The service can be accessed from a desktop computer, mobile device or another system.	ATIA Requirements	EASS-6010: 2.1
Provide SRP Enterprise Authoritative Data Source (ADS)	The SRP Enterprise Data architecture includes a metadata registry that serves as the gateway for accessing common data elements, a data warehouse that provides a central repository of SRP common data, and the data services that retrieve data from authoritative data sources. The Enterprise Data Warehouse provides a central repository of SRP authoritative data that provides a level of abstraction from the source database, is scalable, auditable, and requires fewer interface agreements between Systems. The metadata registry provides the mechanism for directing users to the appropriate access method for obtaining authoritative data. Data elements are accessed from the data warehouse via web services. Where appropriate, multiple access methods are available for exposing each individual data element.	18 documents posted in ATIS-SRP Knowledge center; Range Enterprise Data Warehouse (EDW) documents	EASS-6010: 2.2
Provide Central Army Registry (CAR) Content	Provide a single access point to discover / download Army training resources, (e.g., Field Manuals, Training Support Packages, Individual and Collective Tasks, Drills, POI Courseware). The CAR can be accessed from a desktop computer, mobile device or another system (ISA/SIA). The CAR provides both authenticated and public access (Display not filtered IAW distribution restrictions, download processes enforces distribution restrictions).	None Noted	EASS-6010: 2.3
Manage SRP ESRI Commercial ELA (GIS)	Manage the SRP Esri Enterprise License Agreement (ELA), which provides the SRP community with flexible deployment of ArcGIS software products, information sharing facilitated through training and knowledge transfer, and reduced administrative and procurement expenses. The SRP Esri ELA covers maintenance of existing Esri licenses in support of the SRP, deployment and maintenance of new Esri licenses, access to Esri e-learning, Esri Enterprise Advantage Program (EAP) support, and complimentary pass to the annual Esri User Conference and Esri Developer Summit. Management of the SRP Esri ELA includes assessing and tracking all ELA requests; approving, authoring and distributing licenses; approving and managing access to Esri e-learning; requesting, approving, and managing Esri EAP support activities; approving and distributing Esri complimentary passes; managing software download permissions; providing centralized Esri technical support; documenting and publishing standard operating procedures; coordinating and conducting the annual SRP Esri license validation effort; and providing ELA deployment reports, to include the number of SRP authorized users.	0 documents posted in ATIS-SRP Knowledge center; SRP Esri ELA Management Standard Operating Procedure & SRP Esri Agency Central Support Standard Operating Procedure	EASS-6014: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Provide GIS Distribution Support	Manage supported GIS COTS / GOTS application and tool distribution through a centralized knowledge site and/or portal. Management includes license verification when applicable, deployment and support to the end user community.	0 documents posted in ATIS-SRP Knowledge center; RMTK documents	EASS-6015: 2.2
Identify Training Resource Availability	Reviews External / Higher Training Plans to identify unit training supporting opportunities.	AR 350-1 FM 7-0 TP 350-70-6	TESC-1001: 2.1
Create Unit Near-Term Planning Guidance	Decompose training schedule to focus on Near Term Training Events and validate all resources are available to execute.	DA Pam 415-28 AR 350-1 Real Property Asset Database (RPAD) …list truncated	TESC-1001: 2.2
Schedule Training Event	Unit Command instructs Training POC to schedule training event.	AR 350-1 FM 7-0 TP 350-70-6	TESC-1002: 2.1
Perform Range Scheduling	Support range scheduling and to report utilization. Ensure the scheduling, daily reporting of usage data, and recording of activation / deactivation of Special Use Airspace (SUA), TADSS and Range Complex Facilities.	3 documents posted in ATIS-SRP Knowledge center; AR350-19 …list truncated	TESC-1002: 2.2
Publish Scheduling Reports	Installation Range Management Authority needs to provide a schedule of upcoming training activities to various support organizations at the installation, in support of safe training and required support activities.	3 documents posted in ATIS-SRP Knowledge center; AR 350-19 …list truncated	TESC-1002: 2.3
Process Range Usage / Training Request	Processing a request means that a request activity's status changes as a result of an action by a user. User roles determine the action(s) that can be performed by a specific user (e.g., Scheduler, Unit, units in chain of command). The request processing matrix outlines user roles and their request processing actions. The chain of command rules matrix shows how a request navigates a unit's chain of command.	0 documents posted in ATIS-SRP Knowledge center; AR 350-19 …list truncated	TESC-1002: 2.4
Configure Scheduling & Resource Relationships / Parameters	Provide inventory of training resources available by installation; account for training resources in coordination with authoritative Department of the Army real property database(s).	AR 350-52, dtd 17 January 2014; AR 350-19 …list truncated	TESC-1002: 2.5
Develop Training Calendar	Create / display unit specific Training Calendar.	FM 7-0 AR 350-1 …list truncated	TESC-1003: 2.1
Enter / Build an Institutional Training Schedule	Construct / Add training events (defined lesson plans supporting a specific course) within a training schedule including multiple course POIs.	FM 7-0, 23 Feb 11 AR 10-5-7 TP 350-70-4 …list truncated	TESC-1003: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Enter / Build Operational Training Event	Construct / Add a training event within a training schedule based upon lesson applicable CATS.	FM 7-0 AR 350-1	TESC-1003: 2.3
Develop Training Mission Execution Documents	The system shall retrieve and display unit specific CATS, Lesson plans from POIs.	TP 350-70-7 AR 40-501 …list truncated	TESC-1004: 2.1
Conduct Training Event / Mission Analysis	Data to consider for unit's training status adjustments, training resource consumption and/or modification of the unit's training plan.	AR 350-1 FM 7-0 TP 350-70-6	TESC-1004: 2.2
Training Enabler / Resources Consumed are Identified	Identifies all Training Enabler(s) / Resources Consumed by or in support of a specific training event to include cost data.	AR 350-1, dtd 18 Dec 2009 …list truncated	TRMC-5000: 2.1
Report Training Enabler / Resource Category Utilization	Training Resource Consumption/Use' post-consumption, i.e. how many trainees / students / Soldiers were trained during the class/event in Classroom X, how many trainees / students / Soldiers were trained using Enabler XYZ (by type), etc.	EXORD XXX-15 ADRP 7.0 FM 7-0	TRMC-5000: 2.2
Capture and Report Range / Training Area Utilization	Unit reports range assets used/leveraged and information to determine the extent of range utilization. Installation range organizations record and report munitions expenditures. Report utilization data to TRADOC; maintain and update current and historical usage data on the installation training complex to include known hazards, type of ammunition expended on each range, dud accumulation and disposal records, and clearance status of temporary, dedicated, and high-hazard impact areas where available.	36 documents posted in ATIS-SRP Knowledge center; AR350-19 AR350-38 …list truncated	TRMC-5000: 2.3
Provide TADSS Program Development / Management and Documentation	Provides ability to direct enterprise reporting capabilities and Direct DRMO turn-in when Army directs retirement of a TADSS device/system. Requirements are available / distributed to Installation TSOs (NET training / certification, electrical power requirement, and operator Training etc). Provides fielding / repair / maintenance of TADSS.	TR 11-21 AR 350-1	TRMC-5001: 2.1
Represent TADSS Users in Governance Requirements and Field Operations.	Reviews Inventory to validate device is correctly categorized as training aid, device, and simulator or simulation equipment. Allows for availability projections and proper reporting. Validate Installations have correct operations instructions / regulatory guidance available to properly manage day-to-day TADSS operations.	AR 350-1, appendix G CJCSM 3500.03	TRMC-5001: 2.2

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Validate Installation TADSS Support	Validate TADSS physical Inventory to include Quantity, Locations and serviceability. This includes reconciliation of Property Book quantities equal issued + in Maintenance + Unrepaired + Turned in to DRMO. Requirements for use resourced by installation community and TADSS target units tasked to provide personnel for operator training/certification. Ensure, facility electrical power requirement are met, maintainer Training, etc. Customers and TADSS facility personnel follow operational and reporting policies / procedures and conditions / inventory is updated as changes are known/occur. When there are insufficient TADSS inventories to meet all unit simultaneous requests; the Unit's training priority will be used to determine priority of TADSS request approval.	AR 350-1, appendix G CJCSM 3500.03	TRMC-5001: 2.3
Provide Facility Based TADSS Inventory Display	RFMSS provides installations with an inventory of range assets and information to determine the utilization of the range assets. ; Use the approved Web-based automated support systems, TS–MATS, and/or the Range Facility Management Support System (RFMSS) as applicable, to report TADSS inventory and utilization data to TRADOC.	AR 350-19 AR 350-38 …list truncated	TRMC-5001: 2.4
Maintain Current TADSS Inventory	TADSS Manager maintains current inventory by adjustments due to receipt of new or transferred TADSS.	TP 350-70 TP 350-70-7 …list truncated	TRMC-5002: 2.1
Display TADSS Availability	Integrates TADSS Requests, New Orders and return projections to allow availability projections and processing of customer requests for issue.	AR 350-1	TRMC-5002: 2.2
Manage Instructor / Trainer Inventory Requirements	Required Instructor / Trainers capabilities are correctly identified (MOS/AOC/Job series, rank/skill level, ASI/SI/SQI, education/training, etc.).	AR 350-1 DA Form 87 DA Form 705 …list truncated	TRMC-5003: 2.1
Manage ROPD Instructor Qualification & Certification Requirement(s)	Review courseware instructor inventory needs to meet ROPD learning event(s) requirements.	Installation specific 385-63 1 document posted in ATIS-SRP Knowledge center	TRMC-5003: 2.2
Manage Unit Range (RSO/OIC) Qualification & Certification Requirement(s)	Determine personnel qualifications and certifications required to operate training ranges and training lands.	1 document posted in ATIS-SRP Knowledge center	TRMC-5003: 2.3
Maintain Qualified Instructor / Trainer List	Manager maintains current roster of qualified instructor / trainer by skill / qualification / certification.	AR 350-1 FM 7-0 TP 350-70-6	TRMC-5004: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Forecast Instructor / Trainer Requirements	Monitors availability of qualified instructor / trainers to support course / event / facility generated support request, (e.g., Range Officer, Safety Officer, Guest Speaker).	TP 350-70-10 TP 350-70-7 TR 350-70 …list truncated	TRMC-5004: 2.2
Process Instructor / Trainer Support Request	Training Support Requests are approved if sufficient Instructors / Trainers are projected.	TR 11-21 AR 350-1	TRMC-5004: 2.3
Manage Organizational Qualified Instructor Listing	Manage / display personnel qualified to perform designated duties (installation may associated with an event, facility or equipment).	AR 350-19 AR 570-4 AR 570-5	TRMC-5004: 2.4
Project Support Personnel Inventory Requirements	Required Support Personnel capabilities are correctly identified (MOS/AOC/Job series, rank/skill level, ASI/SI/SQI, education/training, etc.)	TR 11-21 AR 350-1	TRMC-5005: 2.1
Display / Manage Range & Training Area Support Personnel Requirements Availability	Determine personnel resources required to operate and/or maintain training ranges (includes all aspects of range operations, e.g., Firedesk operations, range management / operations).	1 document posted in ATIS-SRP Knowledge center; AR 350-19 …list truncated	TRMC-5005: 2.2
Maintain Qualified Support Personnel List	Support Personnel Manager maintains current list of Support Personnel by certification type, Training event or processes.	TP 350-70-10 TP 350-70-7 …list truncated	TRMC-5006: 2.1
Display Support Personnel Availability / Align Unit Request	Monitors availability of support personnel based on the unit scheduling of facilities requiring specialized instructors / trainers and support requests (i.e., Range equipment operator, Range equipment maintainer, facility operations POC).	TP 350-70-4 JA 350-70-4.3a …list truncated	TRMC-5006: 2.2
Display / Manage Range Support Personnel Listing (includes certification / qualification)	Determine range support personnel resources credentials & availability to operate and maintain training ranges in response to a range request.	AR 350-19 AR 570-4 AR 570-5	TRMC-5006: 2.3
Maintain Expendable Resource Availability	Reviews Expendable Supply Inventory to validate materials are correctly categorized by type: paper, Student Handouts, etc. Validate Supply item inventory data: e.g., quantity, locations are available.	DID Compliance SCORM 204 3rd Ed TP 350-70-10 …list truncated	TRMC-5007: 2.1
Maintain Training Supply Inventory	Resource Manager maintains current inventory by adjustments due to receipt of new items. Manager orders new stock to replace consumed items.	TP 350-70-4 JA 350-70-4.3a …list truncated	TRMC-5008: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Project Supply Item Availability to Support Training	Integrates Supply Requests, New Orders and return projections to allow availability projections. If multiple units request same items (insufficient quantity to fill both), issue order is based on unit hierarchy priority established by Execution Command G-3.	AR 350-1 TR Pam 350-70-6 JA 350-70-6.1 …list truncated	TRMC-5008: 2.2
Display & Schedule Support Items	Support Resources identify resources at a facility or airspace subdivision that are used to support training (such as range towers, bleachers, classrooms, landing lights, etc.) and their quantities. The request form lists any existing equipment and their quantities at the facility (e.g., bleachers, berms, storage buildings, etc.), and 2) lets you specify any additional support items (e.g., targets) and their quantities needed for the training activity.	AR350-19 RFMSS User Manual …list truncated	TRMC-5008: 2.3
Project Facility Inventory Requirements	Reviews Facility Inventory to validate/ project type is correctly identified (classrooms, simulation centers, dual-use facilities, etc.); capabilities are correctly identified (area, capacity, etc. - IAW units of measure identified in DA PAM 415-28); dual use / Shared Facility is properly identified.	DA PAM 415-28 AR 350-52 TP 350-70-9 AR 350-1 TR 350-70	TRMC-5009: 2.1
Manage SRP GIS Policy and Guidance	The SRP GIS Program provides geospatial data development, geospatial analysis, and cartographic support to the SRP core programs, and their functions, and training missions. The SRP GIS Program achieves information excellence, a tenet of the SRP, by providing accurate, complete, and standardized geospatial data, geospatial analysis, and GIS products and applications that adhere to National, Federal, DoD and Army geospatial data standards.	3 documents posted in ATIS-SRP Knowledge center; AR 350-52 AR 350-19 AR 115-13	TRMC-5009: 2.2
Manage GIS Data Services	Provide accurate, complete, and standardized geospatial data, for which DAMO-TRS (SRP) is the proponent that adheres to Federal, DoD, and Army spatial data standards.	3 documents posted in ATIS-SRP Knowledge center; …list truncated	TRMC-5009: 2.3
Provide GIS Support Services	The SRP GIS Program provides geospatial data development, geospatial analysis, and cartographic support to the SRP core programs, and their functions, and training missions. As the foundational support element of the SRP, the SRP GIS Program's mission is to create, analyze, manage, and distribute authoritative standardized geospatial information, products, and services for the execution of training strategies and missions on U.S. Army ranges and training lands. This is achieved by delivering the best, most accurate complete data sets through user-friendly GIS products and applications, supported by SRP GIS Professionals trained in the most current releases of GIS related software and geospatial data standards.	3 documents posted in ATIS-SRP Knowledge center; AR 350-52 AR 350-19 AR 115-13	TRMC-5009: 2.4

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Develop / Maintain Range Operations Regulations & SOPs	Develop range regulations or standard operating procedures (SOP) for range operations of military training and recreational use of training land. SOPs developed will comply with the responsibilities defined in this regulation and with DA Pam 385–63. Develop management controls that ensure safe and efficient use of ranges and training lands by tenant activities, the AR and National Guard, other services, and Government agencies.	AR350-19 DA Pam 385–63	TRMC-5009: 2.5
Provide Range Safety Tool	Manage Army Safety Program; support integration of risk management into installation activities, systems, and processes; implement and evaluate risk management process; and conduct accident investigations.	3 documents posted in ATIS-SRP Knowledge center; …list truncated	TRMC-5009: 2.6
Create & Validate Live Fire Event Planned / Conducted IAW Range Safety Policies	Manage Army Safety Program; support integration of risk management into installation activities, systems, and processes; implement and evaluate risk management process; and conduct accident investigations. Ensures range live fire event is conducted safely IAW all applicable regulations / directives.	3 documents posted in ATIS-SRP Knowledge center; DA Pam 385-63 …list truncated	TRMC-5009: 2.7
Maintain Ranges	There are two components to maintaining a range. UXO clearance management and target maintenance. Manage UXO clearance management includes assessing safety hazards and risks associated with military munitions, including procedures to manage UXO hazards on ranges. Prohibit access to areas known or suspected to contain UXO, except to personnel authorized to perform specific range-related actions. Where access is necessary, either provide UXO avoidance support or remove UXO, in accordance with safety procedures and other relevant requirements Target maintenance includes range planning for targets required for new ranges and target preparation, upkeep, and repair for targets on existing ranges. Target maintenance involves pre/during/post execution checks and supply management.	1 document posted in ATIS-SRP Knowledge center; AR350-19, dtd 30Aug2005, para 4-7 (d - f), page 31; RCMPT user Guide	TRMC-5009: 2.8
Maintain Range Physical Security	The range officer, in coordination with other garrison staff, will conduct range intrusion assessments of the existing range complex and/or individual ranges to determine if there is a need for intrusion detection systems. Assessments must also be conducted as ranges are added or modified. Based on the risk assessment results, the range officer will identify specific surveillance systems and associated costs. The risk levels, surveillance systems, and cost(s) to acquire the intrusion detection system(s) will be identified in the annual Range Operations Work Plan submission.	1 document posted in ATIS-SRP Knowledge center; AR350-19, dtd 30Aug2005, para 4-7 (d - f), page 31; RCMPT user Guide	TRMC-5009: 2.9

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Conduct Range and Training Land Requirement Analysis	Range Modernization requires analysis of doctrinal requirements based on the installation throughput determined from TC 25-1, TC 25-8, Standards in Training Commission (STRAC), Programs of Instruction (POIs), SAMAS, FMSweb, Combined Arms Training Strategies (CATS), and other FMs.	AR 350-19 AR 350-19 …list truncated	TRMC-5009: 2.1
Conduct Range Capacity and Condition Analysis	There should be an assessment of the Army's current range and training land capacity (includes condition) given its existing infrastructure, its future training capacity needs in light of anticipated changes, and whether additional training land and ranges will be required.	AR 350-19 …list truncated	TRMC-5009: 2.11
Provide Range Shortfall / Condition Adjusted Delta Model MAP with Linked Requirements and Condition COP	Range Delta is the excess or shortfall between the total calculated model standard range requirements and the capacity in standard ranges.	AR 350-19 …list truncated	TRMC-5009: 2.12
Provide Range / Land Requirement Scenarios	Scenarios can be created to allow user to make changes to UIC's and MTOE's to show how these changes would affect Range and Land requirements at their installations.	AR 350-19 …list truncated	TRMC-5009: 2.13
Provide Targetry / Tracking Inventory	Provide all SRP supported sites a repository to track on hand targetry and a doctrinal template for TC 25-8 ranges.	AR 350-19 …list truncated	TRMC-5009: 2.14
Provide Unit Training Location Hierarchy Listing	The Unit training hierarchy arranges the training locations information in four specific outputs of requirements. The training Hierarchy is built on the precept of where a unit trains, which may be a different location from where the unit is stationed. The Training Hierarchy contains the following subcategories of units: Active Duty, Army Reserve, National Guard, and institutional schools.	AR 350-19 …list truncated	TRMC-5009: 2.15
Provide Unit Assignments / Training Location Conflict Management	When two or more installations claim that a unit is aligned to them (i.e., trains at that installation), this creates a conflict, which is resolved based on RFMSS utilization data or Command input. A scenario is automatically created that identifies Units that have trained at the installation but are not in the installation's training hierarchy. The ARRM Deconfliction Tool assists in assigning VSCW funding to the installations based on where units actually train, rather than where units are assigned. When two or more installations claim that a unit is aligned to them (i.e., trains at that installation), this creates a conflict in ARRM that must be resolved.	AR 350-19 …list truncated	TRMC-5009: 2.16

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Provide Training Land Requirement Analysis Results	The land requirements tab consists of the Land Installation Summary supported by 5 sub-reports. Each of the sub-reports represent factors used in the modeling calculations and can be viewed by selecting the hyperlinked data in the report. There is one primary output of the Land Installation Summary, the Total Rqmt. The Total Rqmt represents the km2days that are required for maneuver training for the fiscal year selected from the option menu on the tool bar. For each installation the Total Rqmt is calculated by adding the Operational Rqmt and the Generating Rqmt.	AR 350-19, dtd 30Aug2005 …list truncated	TRMC-5009: 2.17
Manage Integrated Training Area Management (ITAM) Work Plan	The ITAM Work Plan section of pages is accessible based on user permissions. The collection of pages under the ITAM Work Plan section provides all users with the ability to view and document detailed information about the selected information. The pages under the ITAM Work Plan section include ITAM Management, Logistical Support, Training Requirements Integration (TRI), Land Rehabilitation and Maintenance (LRAM), Range and Training Land Assessment (RTLA), Sustainable Range Awareness (SRA), Geographic Information Systems (GIS), Resources, Projects, Cyclic Purchases, Work Plan, Execution Tracking, and Checkbook.	AR 350-52, dtd 17 January 2014, para 3-2 (a) (2), page 15; RCMPT documents	TRMC-5009: 2.18
Manage Range Modernization Activities	Range modernization integrates three primary considerations: mission support, environmental stewardship, and economic feasibility to ensure individual installations can support the Training Requirements assigned to their location based on unit throughput.	8 documents posted in ATIS-SRP Knowledge center; AR 350-19 …list truncated	TRMC-5009: 2.19
Conduct Range Modernization	Provide standardized range configurations, infrastructures, interfaces, and devices to support training requirements and range facility technology. Provide configuration control on the standards to facilitate installation and function of the range instrumentation and devices on the range infrastructure.	8 documents posted in ATIS-SRP Knowledge center; AR 350-19 …list truncated	TRMC-5009: 2.2
Manage Range Operations Work Plan	Manage the Range Operations Work Plan is accomplished through the daily entering of projects, personnel cost, ROPD requirements, station of units which train at the installation, and Range Day cost into a automated work plan which can be reviewed/validated by Commands and used by DAMO-TRS as a source for funding requirements in the VSCW MDEP.	AR 350-52 …list truncated	TRMC-5009: 2.21

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Support Installation Range & Land Management	Manage training lands to support the mission readiness of installation and partner organizations. Support partner organization Mission Essential Task List (METL), and execute training population requirements while organizing, prioritizing and maintaining 5 program elements: -Training Requirements Integration (TRI) -Sustainable Range Awareness (SRA) -Range and Training Land Assessment (RTLA) -Land Rehabilitation and Maintenance (LRAM) -Geospatial Information System (GIS).	1 document posted in ATIS-SRP Knowledge center; AR 350-19, dtd 30 Aug 2005 …list truncated	TRMC-5009: 2.22
Implement Range Modernization / Standardization Policies	This activity includes all the processes required develop ranges capable of supporting training for multiple purposes, weapon systems, and combined arms. Range development requires careful, deliberate planning by a team that coordinates the Range and Training Land Program (RTLP) process using AR 350-19. Accurate requirement capture (right size; relevant set of requirements to accomplish the desired mission). Enable material developers to define appropriate material solution using DOTMLPF analysis.	1 document posted in ATIS-SRP Knowledge center; TRADOC Circular 25-8 page 1-1, chapter 5; AR 350-19	TRMC-5009: 2.23
Plan / Manage / Identify Classroom with Attributes	This activity includes planning / management / identification of classroom to include attributes: (1) types (e.g., ARNG, ECP configuration.), (2) capabilities (area, capacity, etc. (3) location (e.g. installation, state, address, facility) (4) requirements for use (training/certification, electrical power requirement, operator(s)), (5) equipment/supplies (information technology, audio-visual equipment, furnishings) included with the classroom, (6) reservation, and Release SOP / procedure for usage policy, (7) Points of Contact (8) Available Hours and (9) Maintenance Holds.		TRMC-5009: 2.24
Maintain Current Facility Inventory / Provide SOP Document	Property Manager maintains current facility inventory available for training event use by adjustments for scheduled facility repairs, new construction, and facility demolition.	DID Compliance SCORM 204 3rd Ed TP 350-70-10 …list truncated	TRMC-5010: 2.1
Process Organization Facility Use Request	Integrates pending facility requests, active reservations and completion of training projections to allow availability projections	TR 11-21 TP 350-70-4 …list truncated	TRMC-5010: 2.2
Equipment Requirements are Determined	Equipment Inventory is reviewed to validate equipment is correctly categorized (tactical vehicles, transportation assets (buses, HETs, etc.), radios, information technology, etc.). Validates equipment training support capabilities are correctly identified (tasks/partial tasks trained, portability, etc.). Validate Equipment Inventory Quantity, Locations and serviceability.	TP 350-70-10 TP 350-70-7 TR 350-70 …list truncated	TRMC-5011: 2.1

The Army Needs to…	BUC Requirement Description	LRP References	BUC Identifier
Maintain Current Equipment Inventory / Provide SOP Document	Equipment manager maintains current inventory by adjustments due to receipt of new equipment and return of serviceable items.	AR 350-1 ALARACT xxx-2014 TP 350-70-9	TRMC-5012: 2.1
Project Equipment Availability to Support Training	Integrates equipment serviceable inventory and maintenance repair projections to allow availability projections.	AR 350-1	TRMC-5012: 2.2
Provide Equipment Maintenance Status / Process Usage Request	Equipment manager places returned item into maintenance for inspection / repairs. Maintainer returns serviceable items to inventory. Items requiring repairs are entered into the appropriate maintenance process.	AR 350-1	TRMC-5012: 2.3
Forecast Training Ammunition Requirements / Provide SOP Document	Present list of eligible weapons, types displayed are determined by which activity is active; Weapon is displayed only when an activity includes a firing event. Weapons that do not have any associated ammunition type that is valid are not displayed. For an air event, if a Weapon is selected where the Weapon Model Name and EIC matches an Aircraft Model Name and EIC, system automatically populates the associated Aircraft. If you are creating a new template or modifying an existing template, the list of available weapons is restricted to only items that do not have a deprecation date either on the current date or in the future.	AR 350-19, dtd 30Aug2005, para 4-11 (b) (2), page 32; RFMSS User Manual	TRMC-5012: 2.4
Process Ammunition Resource Request	Ammunition Reservations / Orders are approved if sufficient supplies are projected. If multiple units request same items (insufficient quantity to fill both), issue order is based on unit hierarchy priority established by Execution Command G-3.	AR 350-1 FM 7-0	TRMC-5014: 2.2
Display Ammunition, Event and Range / Training Area Alignment	Ammunition Present list of eligible ammunition, types displayed are determined by which activity is active; displayed only when an activity includes a firing event. If the activity is a standard event, the Facility/Airspace must be associated to the Weapon/Ammo.	AR 350-19 STRAC Ammunition Tables	TRMC-5014: 2.3

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