



DEPARTMENT OF DEFENSE TRAINING TRANSFORMATION IMPLEMENTATION PLAN

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Office of the Under Secretary of Defense for Personnel and Readiness

Director, Readiness and Training Policy and Programs

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Executive Summary

The dramatic transformation of America's strategic environment continues its significant impact on our military forces and its demand for an equally dramatic transformation in how we prepare forces for combat and noncombat operations. Emphasis remains on shifting from deliberate to adaptive war planning, and from permanent organizations and large hierarchies to smaller, highly-distributed joint and combined forces and standing joint task forces that integrate service capabilities at the lowest levels. To transform the total force and meet combatant commanders' needs in this new environment, we need to transform the way we conduct training.

Training must now prepare the force to learn, improvise, and adapt to constantly changing threats in addition to executing doctrine to standards. To achieve this challenge, this *Training Transformation Implementation Plan* provides a systematic and ongoing process for Training Transformation. The Training Transformation program is designed to provide dynamic, capabilities-based training for the Department of Defense (DoD) in support of national security requirements across active and Reserve components of the Services; Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations. Overall, Training Transformation will accomplish the following objectives:

- Strengthen joint operations by preparing forces for new warfighting concepts
- Continuously improve joint force readiness by aligning joint education and training capabilities and resources with combatant command needs
- Develop individuals and organizations that think joint intuitively
- Develop individuals and organizations that improvise and adapt to emerging crises
- Achieve unity of effort from a diversity of means

Diversity of means are drawn from active and Reserve components of the Services; Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations. The new strategic environment requires orchestration of this wider diversity of means and a broader, more inclusive definition of "jointness."

In the Department's *Transformation Planning Guidance*, Secretary of Defense Rumsfeld stated, "We must transform not only the capabilities at our disposal, but also the way we think, the way we train, the way we exercise, and the way we fight." Training Transformation begins by changing the way people think and the way organizations operate. Creating, storing, imparting, and applying new knowledge throughout the force, individually and collectively, will foster this change.

Three capabilities form the foundation for Training Transformation. These capabilities are designed to prepare individuals, units, and staffs for the new strategic environment, and to provide enabling tools and processes to carry out missions.

Joint Knowledge Development and Distribution Capability—Will prepare future decision-makers and leaders to know, understand, and employ joint operational art, understand the

common operational picture, and respond innovatively to adversaries. It will develop and distribute joint knowledge via a dynamic, global-knowledge network that provides immediate access to joint education and training resources.

Joint National Training Capability—Will prepare forces by providing units and command staffs with an integrated live, virtual, and constructive training environment that includes appropriate joint context, and allows global training and mission rehearsal in support of specific operational needs.

Joint Assessment and Enabling Capability—Will assist leaders in assessing the value of transformational initiatives on individuals, organizations, and processes by assessing training value, training environment integration, and the overall Training Transformation vector to meet validated combatant commander readiness requirements. It will also provide essential support tools and processes to enable and enhance the Joint Knowledge Development and Distribution Capability and the Joint National Training Capability.

Through these three capabilities, combatant commanders—the ultimate focal points for joint operations—will receive better prepared forces that are aligned with their needs.

The Under Secretary of Defense for Personnel and Readiness retains overall responsibility for Training Transformation. The Training Transformation Executive Steering Group and the Training Transformation Senior Advisory Group will oversee the execution and updates of the *Training Transformation Implementation Plan*. New management processes will use spiral development and periodic block assessments to review, assess, adjust, and redirect the actions that will collectively transform DoD training.

This plan describes why Training Transformation is vital to joint force readiness and guides the development of capabilities for transforming future joint operations. Appendix 1 addresses the actions identified in the *Strategic Plan for Transforming DoD Training* and expands on the 2003 Implementation Plan. It provides specific details and milestones for outlining how and when actions are accomplished and specifies organizational responsibility for these actions. Appendix 2 explains the Abbreviations used in the Appendices. Appendix 3 describes Training Transformation's planning and resource management processes. The *Training Transformation Implementation Plan* will be revised periodically to remain aligned with evolving assumptions, new developments, emerging requirements, and Training Transformation vector changes.

1.0. NEED AND CONTEXT

1.1. Challenge

The dramatic transformation of America's strategic environment demands an equally dramatic transformation in how we prepare our military forces for combat and noncombat operations. For more than 40 years, we prepared to defeat a known enemy, with known doctrine and order of battle, on known terrain supported by a modern European infrastructure. Today's force prepares primarily for force projection operations against conventional and unconventional forces in a wide variety of undeveloped and unfamiliar theaters of operations. While previously we prepared to defend against the forces of a great, known power, today we must defend the homeland against nonstate actors employing unconventional means, including weapons of mass destruction. Today's combatant commanders are charged with conducting military operations in this challenging new environment, and the force must be prepared accordingly.

1.2. Force Implication

This transformed strategic environment is impacting significantly on joint force commanders. Emphasis remains on shifting from deliberate to adaptive war planning, and from permanent organizations and large hierarchies to smaller, highly-distributed joint and combined forces and standing joint task forces that integrate service capabilities at the lowest levels. In addition, reliance on the Reserve component has shifted from that of a strategic reserve to being an integral and major component of current force rotations.

1.3. Training Implication

This strategic shift correlates to and immediately impacts upon training that supports joint force readiness, and must be viewed from an entirely new perspective. To be effective and support the needs of combatant commanders in the new strategic environment, training must undergo dramatic transformation. Training must emphasize crisis-action planning, joint force organization, and mission rehearsal. It must prepare the force to learn, improvise, and adapt to constantly changing threats in addition to executing doctrine to standards. To assure total force readiness, the different the training challenges of active and Reserve components must be addressed. The Reserve components have unique training challenges that include limited time and resources available, limited access and connectivity to training, and geographic dispersion of personnel and units. Systems and processes must be designed with the capability to accommodate the active and Reserve components to ensure the needs of both are addressed in parallel, and that both are fully trained prior to employment in joint operations. In the Department's *Transformation Planning Guidance*, Secretary Rumsfeld stated, "We must transform not only the capabilities at our disposal, but also the way we think, the way we train, the way we exercise, and the way we fight." The Training Transformation program is designed to provide dynamic, capabilities-based training for the Department of Defense in support of national security requirements across active and Reserve components of the Services; Federal

agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations.

1.4. Training Transformation Objectives

Secretary Rumsfeld stated, “Today’s war on terror is unlike any our nation has fought before. Instead of opposing armies, we face terrorists who move information at the speed of an e-mail, money at the speed of a wire transfer, and people at the speed of a commercial jetliner. To deal with these new challenges, our forces need to be light, flexible, and agile. The same is true of the men and women who support them in the Department of Defense.” The overarching need to become more agile in light of this new strategic setting represents a significant shift from past training to a future training environment, as summarized in Table 1 below.

Past Training Environment	Future Training Environment
<ul style="list-style-type: none"> • Success = Scale + Scope • Top Down – Centralized • Vertical Integration • Information Hoarding • Local Awareness • Build and Deliver 	<ul style="list-style-type: none"> • Success = Adaptability + Agility • Empowering the “Edges” • Virtual Integration • Information Sharing • Increased Transparency • Sense and Respond

Table 1. Past and Future Training Environments

Training Transformation is a continuous process designed to ensure that all individuals, units, staffs, and organizations, both military and civilian, receive timely and effective joint education and training necessary to accomplish the joint tasks that support the operational needs of combatant commanders. Training Transformation will accomplish the following objectives:

- Strengthen joint operations by preparing forces for new warfighting concepts
- Continuously improve joint force readiness by aligning joint education and training capabilities and resources with combatant command needs
- Develop individuals and organizations that think joint intuitively
- Develop individuals and organizations that improvise and adapt to emerging crises
- Achieve unity of effort from a diversity of means

Diversity of means are drawn from active and Reserve components of the Services; Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations. The new strategic environment requires orchestration of this wider diversity of means and a broader, more inclusive definition of “jointness.”

As the Department transforms military training, it must preserve the existing high standards of excellence in Service core-skills training, and apply these skills to build joint capabilities across the Department of Defense.

1.5. Transformational Capabilities

Achievement of these objectives requires the creation and storage of new knowledge for future military operations, imparting this knowledge to individuals through education, and applying it to individuals and collectives (units and staffs) through the Joint Training System—an integrated framework to prioritize, plan, execute, and assess training requirements. The challenge is to integrate joint training into a joint knowledge management architecture, force management architectures, and readiness reporting processes. This will be achieved through the development and application of the following three capabilities that form the foundation for Training Transformation:

- **Joint Knowledge Development and Distribution Capability**—Will drive the transformation of our military forces using the power of information by creating, storing, imparting, and applying knowledge to enhance an individual’s ability to think joint intuitively. It will prepare future decision-makers and leaders to employ joint operational art, understand the relevant common operational picture, and respond innovatively to adversaries. It will develop and distribute joint knowledge via a dynamic, global-knowledge network that provides immediate access to joint education and training resources. Refer to Section 2.0 for additional detail.
- **Joint National Training Capability**—Will drive the transformation of our military forces by creating, storing, imparting, and applying knowledge in improved ways to units and staffs. It will also prepare forces by providing units and command staffs with an integrated live, virtual, and constructive training environment with appropriate joint context that allows accurate, timely, and relevant training and mission rehearsal in support of specific operational needs. Refer to Section 3.0 for additional detail.
- **Joint Assessment and Enabling Capability**—Will assist leaders in assessing the results of transformational initiatives on individuals, organizations, and processes by assessing training value, training environment integration, and the overall Training Transformation vector to meet validated combatant commander readiness requirements. It will also provide essential support tools and processes to enable and enhance the two aforementioned capabilities. Refer to Section 4.0 for additional detail.

1.6. Rapid Spiral Development

The Department instituted evolutionary acquisition and spiral development initiatives to reduce cycle time and increase speed of delivery of advanced capabilities to our warfighters. Evolutionary acquisition defines, develops, produces or acquires, and fields incremental blocks of capability through an interactive process among users, testers, and developers. Training Transformation will be accomplished using the "build-a-little, test-a-little" approach known as rapid spiral development. This plan describes an incremental block development approach with

formal program assessments, beginning in 2005 and occurring every two years thereafter, to measure impacts on joint force readiness and guide subsequent investments in Training Transformation capabilities.

The Department will use rapid spiral development to establish a Successively-Building Training Environment as a means to achieve the desired future training environment as depicted in Table 1. The Successively-Building Training Environment (Figure 1) consists of three waypoints: 1) near-term throughput capacity of individuals, units, and staffs trained prior to arrival in combatant commands; 2) mid-term innovative environment to create continuously new Joint Operational Capabilities; and 3) far-term real-time mission planning and rehearsal transparency with the operational environment. These waypoints are sequenced to meet combatant command needs, with emphasis on crisis-action planning, joint force organization, and mission rehearsal. The first waypoint focuses on providing combatant commands with a steady flow of joint-trained individuals, units, and staffs. The second waypoint maintains the steady flow of joint-trained personnel and supports an innovative training environment for new Joint Operational Capabilities, based on combatant commander demand. The third waypoint continues the throughput capacity to support new Joint Operational Capabilities, and transitions into a real-time mission planning and rehearsal environment that enables forces to learn, improvise, and adapt rapidly to constantly changing threats.



Figure 1. Waypoints of the Successively-Building Training Environment

1.7. Implementation Plan Overview

This *Training Transformation Implementation Plan* provides the details for implementing the vision and actions of the approved *2002 Strategic Plan for Transforming DoD Training* and revises the *2003 Training Transformation Implementation Plan*. It also explains why Training Transformation is vital to joint force readiness and guides the development of capabilities for transforming future joint operations. Sections 2.0, 3.0, and 4.0 describe each of the Training Transformation Capabilities. Section 5.0 outlines the management and oversight of Training Transformation and discusses Training Transformation planning and resource management. Appendix 1 is an expansion of the 2003 version. It outlines how and when actions will be accomplished by providing details, milestones, and organizational responsibilities. Appendix 2 provides a list of abbreviations and Appendix 3 addresses the planning and resource management process. The *Training Transformation Implementation Plan* will be revised periodically to remain aligned with evolving assumptions, new developments, emerging requirements, and Training Transformation vector changes.

2.0. JOINT KNOWLEDGE DEVELOPMENT AND DISTRIBUTION CAPABILITY

2.1. Concept

Current and future joint forces must be multi-skilled and multi-dimensional, and must possess the intellectual capability to think joint intuitively. The intellectual interoperability required to meld service capabilities into an inherently joint force comes from a mastery of the joint operational art. Future joint force leaders must strive to reach new joint education and training standards by continually improving individual knowledge, skills, and abilities to achieve desired effects in decisive operations. Training Transformation leverages the use of knowledge to improve joint force readiness by enabling personnel to think in terms of joint concepts, and by building upon Service education and training foundations.

The Joint Knowledge Development and Distribution Capability will drive the transformation of our military forces using the power of information by creating, storing, imparting, and applying knowledge to enhance an individual's ability to think joint intuitively. It will provide rapid and seamless flow and exchange of knowledge across the joint community. As suggested by the *Transformation Planning Guidance*, this capability facilitates a transformed culture by preparing future decision-makers and leaders (officers, enlisted, and DoD civilians across the joint community) to employ joint operational art, understand the relevant common operational picture, and respond innovatively to adversaries. It will also dramatically enhance the joint warfighter's ability to transform knowledge into combat power.

The Joint Knowledge Development and Distribution Capability will leverage state-of-the-art distribution processes to provide DoD personnel with the education and training resources needed anytime, anywhere. This capability also will ensure that subject-matter expertise is available immediately to the on-scene commander, first responder, and other users. Examples of such expertise include military war college instructors and experts in the areas of language, culture, science, strategy, and planning. Knowledge—in the form of education, learning, training, and human expertise—will be distributed via a network-centric, knowledge-based, joint architecture that is interoperable with the Joint Training System. This architecture will provide a framework for immediate access to education and training resources. Centralized development and management, and decentralized execution of the Joint Knowledge Development and Distribution Capability will capitalize on the Nation's advanced information technology resources and harness them for the joint community.

The subsections below describe the initiatives required to enable this capability.

2.2. Development

The development initiative focuses on creating a career-long continuum of knowledge that integrates individual functional career education and training with joint and service specialties. This continuum implements education and training management processes within a framework of capabilities based on combatant commander needs. The methodology for this initiative is

based on joint individual education and training needed to perform joint operations and to serve on joint or combatant command staffs.

The main goal of this initiative is to provide a capability that improves individual joint combat proficiency and effectiveness. This will be achieved when personnel are developed according to a joint learning continuum, acquiring and performing higher-level skills, and the joint education and training courseware completion and certification data is captured to ensure personnel are adequately educated and trained before personnel are assigned to support joint operations. Future development requires integration of individual knowledge development needs with new technologies to create a continuum of joint learning. Such learning transforms education and training into a joint-centric learning environment.

To implement Training Transformation, this initiative will capitalize on joint training initiatives, previous work done by the Services and industry, Joint Professional Military Education programs, and existing and emerging technologies and concepts.

2.3. Distribution

The goal of the distribution initiative is to ensure that the end user has ready access to joint individual education and training knowledge anytime, anywhere. As part of the Training Transformation effort, the Joint Knowledge Development and Distribution Capability Joint Management Office will manage and oversee the development of the global distribution capability. The global distribution capability will enable the distribution of joint individual education and training resources and provide interoperable management of joint knowledge through integration with the Joint Training System, Service Personnel Management Systems, and other Department of Defense systems. Where possible, this initiative will build upon previous work with the Services and industry. The global distribution capability will serve joint individual education and training needs across the Department of Defense, international coalition partners, and nongovernmental organizations.

2.4. Joint Management Office for the Joint Knowledge Development and Distribution Capability

The Chairman, Joint Chiefs of Staff, has established a Joint Management Office to manage and oversee the development of the Joint Knowledge Development and Distribution Capability. Consistent with DoD guidance, the Joint Management Office uses rapid spiral development to manage and oversee:

- Collection and consolidation of combatant commander requirements for joint individual education and training
- Identification of common education and training objectives for thinking joint intuitively, employing joint operational art and concepts, understanding the common operational picture, and responding innovatively to adversaries
- Identification of common metrics for joint certification and accreditation of individuals

- Development and distribution of joint education and training content, tools, and services
- Identification of common technology baselines for the development and distribution of joint individual education and training
- Collaboration with the research and development communities to incorporate proven emerging education and training technologies into product development and distribution efforts
- Collaborative efforts with other organizations to leverage existing capabilities to the greatest extent feasible.

The Joint Management Office leverages existing programs, such as the Regional Security Cooperation Network, the Asia-Pacific Area Network, and other DoD systems where appropriate, to assist in the development of the multinational aspects of the Joint Knowledge Development and Distribution Capability. The Advanced Distribution Learning Co-Laboratory in Alexandria, Virginia, has been rearranged to serve as the location for the Joint Knowledge Development and Distribution Capability Joint Management Office. Research and development efforts have been refocused to provide advanced technology and learning methods/strategies support to the Joint Knowledge Development and Distribution Capability Joint Management Office. A contract support team from the Co-Laboratory in Alexandria, Virginia, has been transferred to support the Joint Knowledge Development and Distribution Capability, as directed by the Joint Management Office.

The Joint Management Office works with program managers and personnel from the implementing organizations such as combatant commands, Services, National Defense University, senior service colleges, and regional centers. Program managers may be appointed by sponsors or lead development agencies of products or courseware to oversee the development, distribution, and lifecycle management of the Joint Professional Military Education and joint training initiatives. The program managers draw upon program resources for the analysis, design, development, testing, implementation, and revision of instructional content associated with these programs. The Joint Knowledge Development and Distribution Capability will provide data on joint education and training courseware completion and certification to the Joint Training System.

Successful development and global distribution of the Joint Knowledge Development and Distribution Capability applications requires open-architecture standards and consistent methods for design, delivery, storage, tracking, and management of knowledge resources. The Joint Knowledge Development and Distribution Capability will leverage existing distribution capabilities to the greatest extent feasible.

2.5. Joint Knowledge Development and Distribution Capability Working Group

The Chairman, Joint Chiefs of Staff, established the Joint Knowledge Development and Distribution Working Group comprised of the Office of the Deputy Under Secretary of Defense (Readiness, Readiness and Training Policy and Programs), Joint Staff, Joint Forces Command

(as the Joint Force Trainer), National Defense University (as the Joint Force Educator), other combatant commands, combat support agencies, Services (active and Reserve components), senior service colleges, Special Operations University, National Guard Bureau, North American Aerospace Defense Command, and Combined Forces Command. The working group advises the Joint Management Office and provides recommendations on development and distribution aspects of the Joint Knowledge Development and Distribution Capability. The working group will develop, prioritize, and obtain approval for requirements in accordance with pre-coordinated and approved criteria and procedures. The working group will coordinate the development and implementation of common methods to certify individual competency of active and Reserve component members in the joint operational art and the integration of the Joint Knowledge Development and Distribution Capability with existing programs of DoD education and training institutions.

2.6. Milestones

The Joint Management Office will employ an iterative, spiral process for capability development. Major capability milestones detailed in Appendix 1, Section 2.0 are:

- Create internal guiding documents, January 2004
- Initiate oversight of joint individual education and training courseware development, July 2004
- Develop Initial Capabilities Document and submit for approval, October 2004
- Develop standards for joint courseware development and distribution, September 2005
- Develop initial global distribution capability for joint knowledge, September 2007
- Investigate standards-based learner tracking and advanced content management technologies, June 2006
- Identify information for sharing among Department of Defense systems, September 2007
- Enable automated user registration and authentication for accessing joint courseware, September 2007
- Enable standards-based interoperable learner profile tracking between the global distribution capability and service personnel systems, September 2007
- Incorporate Knowledge Management capabilities into global distribution capability, September 2009
- Enable advanced content management capabilities, including reuse of education and training objects in development, September 2009
- Develop joint individual education and training continuum and standards, November 2009

3.0. JOINT NATIONAL TRAINING CAPABILITY

3.1. Concept

Building on the training transformation of the 1970s, the Joint National Training Capability will provide an environment for realistic joint exercises against aggressive, free-playing opposing forces, with credible feedback. The Joint National Training Capability is based on an integrated live, virtual, and constructive simulation environment that is available globally on a 24-hour basis, and linked to real-world command and control systems. The Joint National Training Capability can be used to train forces against a general threat, to conduct mission rehearsal against a specific threat, or to experiment with new doctrine, tactics, techniques, procedures, Joint Operational Concepts, and equipment.

The Joint National Training Capability, as the integrating environment, will provide training to the full complement of defense audiences. Active and Reserve forces from a single service will be able to train in a realistic joint context with other service's forces and joint battle staffs represented with extensive simulation support. Battle staffs from joint headquarters, component headquarters, and service tactical headquarters will train and rehearse using real-world command and control systems, with tactical forces represented with extensive simulation support. The Joint National Training Capability will evolve to encompass a larger training audience, including coalition partners and Federal, state, local, and nongovernmental agencies. These integrating environments are codified in the following Joint National Training Capability thrusts:

- Improved Horizontal Training—Build on existing service interoperability training
- Improved Vertical Training—Link component and joint command and staff planning and execution
- Integration Exercises—Enhance existing joint exercises to address joint interoperability training in a joint context
- Functional Training—Provide dedicated joint training environment for functional warfighting and complex joint tasks

The subsections below describe the initiatives required to enable this capability.

3.2. Architecture Initiative for Live, Virtual, and Constructive Simulations

Common operational, technical, and system architectures will be developed and adopted to allow integrated live, virtual, and constructive simulations to interoperate regardless of service provider. An ongoing policy review and assessment is examining current policies that impact the development of the Joint National Training Capability and the linkage of integrated live, virtual, and constructive simulations for training, experimentation, and mission rehearsal. Following the review and assessment, a policy-establishment period will be implemented to produce DoD policy to guide departmental efforts, including the Joint National Training Capability, to conform to the Global Joint Training Infrastructure Plan. Developed policies will

provide broad guidance on range modernization and sustainment, and embedded training capabilities.

Through the execution of a Joint National Training Capability systems-engineering and configuration-management development process, a global, multinational network of constructive computer simulations, man-in-the-loop virtual simulators, and live forces at instrumented ranges will provide a training and mission rehearsal environment that supports a broad spectrum of joint and service training. Through a robust research and development partnership incorporating science and technology initiatives, the Joint National Training Capability will assist in the modernization of ranges, and in improving infrastructure through execution of the Global Joint Training Infrastructure plan. The Global Joint Training Infrastructure development processes will remain open to incorporate state-of-the-art technology from industry, the Department of Defense, and other governmental sources in support of the Joint National Training Capability.

3.3. Range Modernization Initiative

The Services maintain training ranges and operating areas necessary to satisfy core service training requirements. This frequently results in the development and fielding of unique instrumentation for the operating platforms, and a wide variety of infrastructure necessary to create the training environment, capture “ground truth,” assess activity and performance, and provide feedback to the training audience in a timely manner. Examples include position information collection systems, weapons scoring, threat emitters, and other opposition force equipment, communications, and exercise surveillance and support systems. Providing and modernizing such training functionality and capabilities are the responsibilities of the Services.

These established capabilities form the baseline of a modern range infrastructure. It is this baseline that forms the foundation of the Joint National Training Capability, from which Joint National Training Capability investments will selectively expand and connect service training ranges and instrumentation systems to create joint capabilities. An example would be adding the systems for fixed-wing aircraft tracking and weapon-engagement scoring to the infrastructure at an Army range to enable accredited, joint training events. Occasionally, modifications will be required to service training-support systems to incorporate joint functionality.

3.4. Sustainable Ranges Initiative

Military ranges and operating areas are fundamental enablers of unit training, be it basic or advanced, service or joint. Encroachment pressures—such as private development adjacent to ranges, restrictions imposed by environmental regulation, or growing competition for airspace and frequency spectrum—are increasingly impeding the ability to conduct unit training in realistic environments. Encroachment pressures limit low-altitude flight training, over-the-beach operations, night and all-weather training, live-fire training, and the application of new weapon technologies.

The Department is pursuing a comprehensive solution to encroachment pressures through the Sustainable Ranges Initiative. This initiative includes policy, organization and leadership,

programming, outreach, legislative clarification, and a suite of internal changes to foster range sustainment. Department of Defense policy directives have been or are being prepared to promote a long-range, sustainable approach to range management. The Office of the Secretary of Defense and the Services are taking a proactive role in developing programs to protect facilities from urbanization, and working with states and nongovernmental organizations to promote sound land usage. The sustainable ranges outreach effort encourages stakeholders to improve understanding of readiness needs among affected groups, address concerns of state and local governments and surrounding communities, work with nongovernmental organizations on areas of common interest, and to partner with groups outside the Department of Defense to reach common goals. Where possible, the Department is seeking administrative and regulatory solutions to issues where mutually acceptable courses of action can be determined by working with other Federal or state agencies.

3.5. Embedded Training in Major Defense Acquisition Programs Initiative

Embedded training in Major Defense Acquisition Programs must be designed and fielded to integrate immediately into the Global Joint Training Infrastructure, which includes architectural standards, range instrumentation, simulators and simulations, and communications to support distributed live, virtual, and constructive connectivity. Deployed forces must have the ability to sustain readiness through training and rehearsal, regardless of location or length of deployment. To support this initiative, existing defense acquisition and training policies that influence Major Defense Acquisition Programs will be reviewed and assessed, and changes to policies and procedures will be made as needed.

The new or revised policies will provide an embedded training capability in targeted Major Defense Acquisition Programs that includes human performance-aiding capabilities within operational systems. Embedded training capabilities will be consistent with joint operational and joint training architectures, and will be achieved using real-world command and control systems. Embedded training will be tracked in a manner similar to “key performance parameters” throughout the acquisition process. Through embedded training and deployable training infrastructure, forces will be able to train globally, and manage and assess readiness regardless of location or duration of deployed operations. Service sponsors for existing and future Major Defense Acquisition Programs, with maximum participation from the training community, will fund and conduct assessments to determine whether or not requirements for embedded training are identified, and if so, whether they are adequately expressed and resourced to meet the stated need. If not, and applying embedded training is deemed advisable, the appropriate service sponsor will resource and take appropriate corrective action.

3.6. Joint Force Trainer Community and Joint National Training Capability Joint Management Office

In late 2002, United States Joint Forces Command established the transformative Joint Force Trainer community, a comprehensive network of training-associated organizations within joint forces.

The core of the Joint Force Trainer community is the Joint Warfighting Center. The Joint Warfighting Center was initially structured and resourced to provide four-phase (requirements, planning, execution, and assessment) Joint Training System support to the warfighter's current joint-capable forces and joint-force capability requirements. In keeping with the Joint Forces Command's and the Joint Force Trainer's transformation responsibilities, the Joint Warfighting Center now complements current capability development with aggressive assessment of joint training-based activity to identify, develop, and integrate near-term joint force capability improvement. The results of assessment (single combatant command) and meta-assessment (all combatant commands) are training-based joint warfighter capability improvement initiatives identified as joint warfighting deficiencies captured for integration into the Joint Training System, and managed through the Transformational Change Package (the doctrine, organization, training, materiel, leadership, personnel, facilities format) process for implementation.

The Joint Force Trainer community facilitates the implementation of the Joint Forces Command capability integration activity, incorporating the ongoing efforts of the Joint Battle Center, Joint Battle Management Command and Control initiative, and the Standing Joint Force Headquarters (prototype) into training activities. In addition, the Joint Force Trainer integrates learning methods, strategies, and tools developed from the results of Joint Test and Evaluation, Advanced Concepts Technology Demonstrations, joint and service experimentation and prototyping, and lessons learned from forces in real-world operations.

The Joint National Training Capability provides the principle vehicle for joint force training. Implementation of the Joint National Training Capability benefits the combatant commanders through the scalable integration of live, virtual, and constructive environments made available in a robust joint context, and by drawing on the Joint Operational Concepts. With an appropriate joint context, combatant commanders have access to consistent measures of effectiveness in terms of how their organizations perform against standard joint operational requirements. Commanders also are able to choose certified Joint National Training Capability sites that can provide accredited training on specific joint tasks.

The Joint National Training Capability Joint Management Office is a fully-integrated organization of the Joint Forces Command Joint Force Trainer community. It leverages existing Joint Force Trainer capabilities, and resources the development of additional Joint Force Trainer capabilities to meet specific Joint National Training Capability outcome requirements. In this context, the Joint Management Office will serve as the focal point for planning, program preparation, and execution of their respective resources and events. Additionally, it develops processes and standards to certify Joint National Training Capability sites and training support

systems, and accredits Joint National Training Capability events. The Joint Management Office uses existing Joint Force Trainer execution capabilities to develop and manage processes that gain input from and build consensus among combatant commands, Services, combat support agencies, and other DoD and governmental organizations.

Science and technology breakthroughs are being leveraged to improve training. Development processes are being established to ensure that the training audience is equipped with current technology. The Joint National Training Capability Joint Management Office is responsible for identifying, reviewing, merging, evaluating, validating, and collaboratively prioritizing joint training requirements, which will then be supported by the latest systems and technical solutions that accommodate combatant command, combat support agency, and service requirements.

3.7. Milestones

Major capability milestones detailed in Appendix 1, Section 3.0 are:

- Assess Joint Tactical Tasks in a joint context in selected joint exercises beginning with the first Joint National Training Capability exercise in January 2004
- Provide joint context with command, control, communications, computer, intelligence, surveillance, and reconnaissance to major service training events and joint command and staff training events by October 2005
- Use the Joint Training System to link lessons learned from military operations, joint training, experimentation, and testing to the development and assessment of joint operational capabilities by October 2005
- Create an initial Web-based delivery capability for operational planning and mission rehearsal by October 2005
- Conduct specifically-designed major transformation events with complex tasks in a joint context to assess systematically the joint operational capabilities by October 2007
- Conduct a multinational Joint National Training Capability event by October 2007
- Demonstrate a deployable Joint National Training Capability, and mission rehearsal capabilities by October 2007
- Train joint forces to conduct operations in key transformation mission areas by October 2009
- At Full Operational Capability, joint and interoperability training is conducted and analyzed, with lessons learned leading to improvements across the spectrum of doctrine, organization, training, materiel, leadership, personnel, and facilities by October 2009
- Establish fully-trained Standing Joint Force Headquarters with functional components by October 2009

4.0. JOINT ASSESSMENT AND ENABLING CAPABILITY

4.1. Concept

In today's information age and new globalization environment, success is defined more by force adaptability and agility than by industrial age scale and scope. Department of Defense Force Transformation is about becoming more adaptable, agile, and lethal through application of rapidly evolving capabilities and technologies, and the Training Transformation program is a key enabler for the overall success of DoD Transformation.

As a key enabler, Training Transformation will result in the ability to train truly as we fight and fight truly as we train. To do so, the Training Transformation program must focus on a training system that mirrors the information age operating environment, the same environment in which adversaries adapt quickly and asymmetrically, and a training system that is transparent to force operations.

The Director, Readiness and Training Plans and Policy, within the Office of the Deputy Under Secretary of Defense for Readiness, has established the Joint Assessment and Enabling Capability to assist leaders in assessing the value of transformational initiatives on individuals, organizations, and processes by assessing the training value, training environment integration, and the overall Training Transformation vector to meet validated combatant commander readiness requirements. This capability will also provide essential support tools and processes to enable and enhance the Joint Knowledge Development and Distribution Capability and the Joint National Training Capability. The Joint Assessment and Enabling Capability Office reports to and receives direction from the Director, Readiness and Training Plans and Policy.

The Joint Assessment and Enabling Capability is the systematic process of anticipating, evaluating, and guiding rapid spiral development of Training Transformation. This systematic process includes innovative use of performance assessment tools, techniques, policies, and metrics, in support of national security requirements. The process will be applied across the Department of Defense in cooperation with Federal agencies; international coalitions; international organizations; and state, local, and nongovernmental organizations. The Joint Assessment and Enabling Capability will assist leaders in guiding Training Transformation to achieve transparency between training and operations and accelerate the way the force becomes more adaptable and agile.

4.2. Assessment Initiatives

New Joint Training Environment

While the Services have long had robust training development, execution, and assessment constructs, the same is not true for the joint force. To achieve transparency between training and operations, a new training environment must convert requirements into action within days and weeks – as force operations do - rather than months and years, which, in the context of joint exercise scheduling, is the current system's cycle time. The current Joint Training System was

designed to meet combatant commander needs for the early to middle 1990s. The Training Transformation program seeks to strengthen and broaden the focus of the current Joint Training System and its automated support tool (Joint Training Information Management System) to increase the priority of joint training in the Department of Defense by using the Joint Training System methodology as the foundation for service, interagency, intergovernmental, and multinational training programs.

The new Joint Training Environment will serve as the architectural framework for Training Transformation by fully realizing mission planning and rehearsal and one that continuously identifies and implements new joint operational requirements for specific missions supported by the Joint Knowledge Development and Distribution Capability and Joint National Training Capability.

Assessments

The Joint Assessment and Enabling Capability will conduct periodic assessments to measure, guide, and focus rapid spiral development progress of the new Joint Training Environment.

To achieve the waypoints of the Successively-Building Training Environment, outlined in section 1.6, the Joint Assessment and Enabling Capability will periodically conduct these assessments:

- **Training Value Assessments (Level 1):** Conducted by the Joint Knowledge Development and Distribution Capability and Joint National Training Capability, Training Value Assessments evaluate individual, unit, and staff training performance. This level assessment determines individual and event training value. The Joint Assessment and Enabling Capability will support development of new measures, processes, and tools for performance assessment. This assessment determines the value of Training Transformation to individual staffs and units.
- **Training Integration Assessments (Level 2):** Conducted by the Joint Assessment and Enabling Capability, Training Integration Assessments evaluate integration of policies, processes, and information systems to identify constraints to Training Transformation progress.
- **Training Transformation Vector Assessments (Level 3):** Conducted by multiple organizations and coordinated by the Joint Assessment and Enabling Capability, these transformation assessments provide Training Transformation progress and direction information to senior decision makers.

The Joint Assessment and Enabling Capability will conduct various portions of each assessment every ninety days for inclusion in the DoD Balanced Scorecard.

Link Training to Readiness through the Joint Assessment and Enabling Capability

Training is essential to joint force readiness. Intellectual interoperability is a key component of readiness for joint operations and consists of joint knowledge and experience transmitted and

reinforced through joint education and training. The challenge is to develop more accurate and insightful methods for measuring the effectiveness of joint education and training on performance of joint operations.

Future joint force training readiness reporting through the Defense Readiness Reporting System will be based on the process established in the Joint Training System. The Joint Assessment and Enabling Capability will be used to provide a more robust reporting in terms of doctrine, organization, training, materiel, leadership, personnel and facilities via the DoD Balanced Scorecard approach. Such reporting will include two levels of spiral development: a basic level for predictable requirements, and a second level to assess individual and unit trainability and adaptability for unforeseen exigencies. The goal of the Defense Readiness Reporting System is to expand readiness reporting to include all missions assigned or implied by the Secretary of Defense to DoD components. These missions include major combat operations, smaller-scale contingencies, military operations other than war, and theater security cooperation programs. The focus of the readiness reporting system will be on the joint mission essential tasks of the combatant commanders.

4.3. Enabling Initiatives

Guidance and Policy

The Joint Assessment and Enabling Capability, along with the other Training Transformation stakeholders, plays a major role in the development of policy as outlined in Section 5.3, and assists leaders in guiding the Training Transformation Program.

Joint Lessons Learned Program

Training Transformation requires a correlating transformation of the lessons learned process drawn from operational missions and training venues. Lessons learned from operational missions must be systematically captured and injected into ongoing experimentation and concept development to generate new joint tactics, techniques, and procedures. Combatant commanders will develop war plans and defense security cooperation plans, taking into account lessons learned from ongoing and past operations. Lessons learned derived from joint training venues will serve as principal sources for the design of future joint education and training curricula, courseware, training events, operational tests, experimental concepts, and warfighter operations. The active collection, analysis, dissemination, and use of operational and training-related lessons learned are required for improved joint force readiness.

A key component of the Joint Lessons Learned Program—the Joint Center for Lessons Learned—identifies strategic trends and issues, and performs analysis in joint warfighting deficiencies. This center, coupled with the Joint Lessons Learned Specialist element, is the foundation of a network of lessons-learned experts from combatant commands, Joint Staff, Services, combat support agencies, and education institutions who work together to provide corrective feedback from joint operations, training exercises, and experimentation.

Track Joint Education, Training, and Experience of DoD Personnel

Personnel systems must ensure the assignment of the right individuals to the right joint billets at the right time. To achieve this objective, joint education, training, and experience requirements and accomplishments must be tracked for all DoD personnel. This tracking encompasses accurately describing joint billet and joint leader development requirements, developing appropriate standards, and establishing certification processes. The Joint Assessment and Enabling Capability will lead the effort to establish personnel policies on tracking joint education, training, and experience. Increased emphasis on joint leader development will be incorporated into these policies so that future joint leaders are fully developed and prepared for joint warfighting. This Joint Assessment and Enabling Capability will also coordinate with the Office of the Chairman of the Joint Chiefs of Staff in the establishment of a joint certification process for DoD personnel; and the provision of enablers for integrating manpower, personnel management, and training systems resulting in trained and qualified personnel being assigned to joint duty positions.

4.4. Milestones

Major capability milestones for Joint Assessment and Enabling Capability detailed in Appendix 1, Section 4.0 are:

- Joint Assessment and Enabling Capability Office is fully staffed and functioning by February 2004
- Quarterly assessments are conducted and coordinated and feed the Training Transformation portion of the DoD Balanced Scorecard beginning March 2004
- Performance Assessment Architecture is developed by October 2004
- Block Assessments are produced in 2005, 2007, and 2009
- Linkage is validated between the Joint Training System and the Defense Readiness Reporting System by March 2006
- An enhanced Joint Lessons Learned Program is implemented and Joint Lessons Learned Specialists are assigned and in place by November 2006
- Joint education, training, and experience of DoD personnel is tracked and used for joint assignment selection by October 2007

5.0. TRAINING TRANSFORMATION MANAGEMENT AND OVERSIGHT

5.1. Management Responsibilities

Training Transformation is a continually evolving process that requires management of the overall direction while adjusting for new developments to achieve Training Transformation objectives. The management process uses spiral development to review, assess, adjust, and redirect the actions that will collectively transform DoD training.

The Under Secretary of Defense for Personnel and Readiness maintains overall responsibility for Training Transformation. The Deputy Under Secretary of Defense for Readiness serves as executive agent for Training Transformation. The Director of Readiness and Training Policy and Programs has oversight of Training Transformation progress, daily management, and coordination of the Department’s Training Transformation activities. The Director also ensures collaboration across the entire Department and guides the efforts of the Joint Integrated Process Team and working groups that oversee implementation of Training Transformation actions.

5.2. Oversight Forums

The Training Transformation Executive Steering Group and Senior Advisory Group (refer to Figure 2.) oversee the development and execution of the *Training Transformation Implementation Plan*.

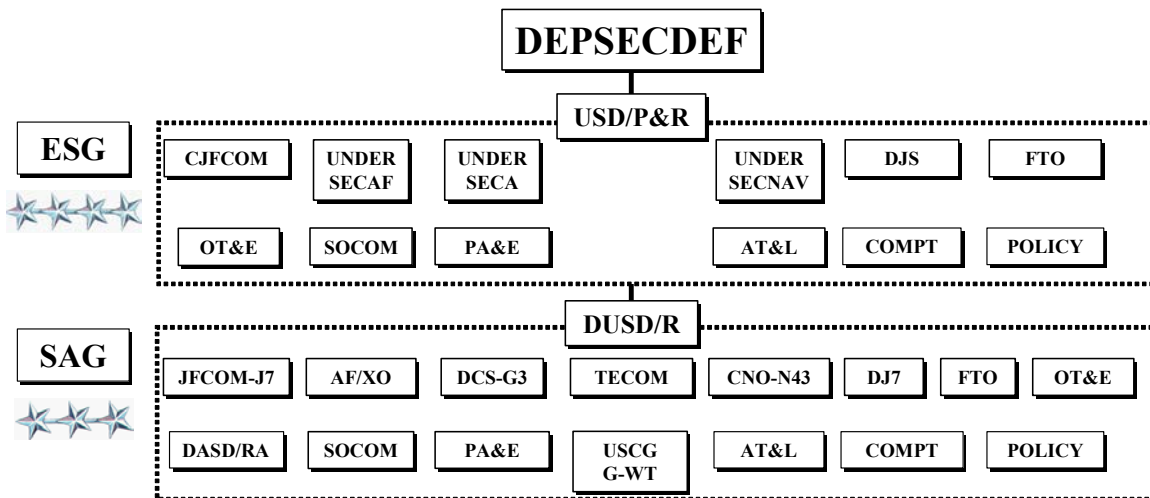


Figure 2. Training Transformation Oversight

These two governing bodies also oversee the resolution of issues and manage the Training Transformation process for the Department. In this regard, they are responsible to the Secretary and Deputy Secretary of Defense for the development of Training Transformation plans and for overseeing the actuation of Training Transformation. Additionally, the Senior Advisory Group ensures the timely allocation, transfer, and execution of Training Transformation program resources.

The Training Transformation Joint Integrated Process Team is subordinate to the two oversight groups. It serves as the primary, collaborative working forum that provides input to the oversight groups and responds to their guidance. The Joint Integrated Process Team consists of senior analysts, planners, and action officers from the staffs, agencies, and commands contributing to DoD Training Transformation, and is chaired by the Director, Readiness and Training Plans and Policy.

5.3. Guidance and Policy

Training Transformation initiatives must be codified in DoD policy. Policy ensures that the initiatives are institutionalized within the Department of Defense, provides guidance for planning and execution of Training Transformation programs, and provides procedures and assigns responsibilities for the training and management of DoD personnel—both military and civilian—and military units. Policy promotes the effective integration of activities across Training Transformation to minimize duplication of effort and focus on priorities. Training Transformation must address the following guidance and policy areas:

- Personnel and assignments
- Education, training, and experimentation
- National training strategy, policy, and programs
- Resource management and oversight
- Embedding training into defense acquisitions
- Range modernization and sustainment
- Assessing joint education and training, and reporting readiness
- Linking training requirements horizontally and vertically
- Interoperability of training systems, infrastructure, and networks

5.4. Training Transformation Planning and Resource Management

Training Transformation was designated a program by the Secretary of Defense, and it was included in the Fiscal Year 2004 Program Objective Memorandum. The Office of the Under Secretary of Defense for Personnel and Readiness is responsible for the DoD Training Transformation program including planning, program development, annual budget submission coordination, and execution oversight. The Under Secretary of Defense for Personnel and Readiness uses the existing Executive Steering Group, the Senior Advisory Group, the Joint Integrated Process Team, the Training Transformation Capability Offices, and the processes inherent therein, to coordinate and oversee Training Transformation. The Training Transformation management process includes planning, program development, annual budget submissions, and program execution.

The Training Transformation Planning and Resource Management process is fully consistent with the DoD Joint Defense Capabilities Process and it will remain in effect until officially cancelled or changed.

The executive agent will periodically update the Training Transformation Strategic and Implementation Plans to reflect new developments, emerging requirements, implementation progress, and coordination of resources with the Under Secretary of Defense (Comptroller). For details, see Appendix 3, *Training Transformation Planning and Resource Management*.

