

# CHAPTER 5

## ARMY FORCE DEVELOPMENT

*"Most militaries do change, but in most cases, it is when wartime pressures, wartime setbacks force them into it... Today, we seek to change in a time of relative peace, in a time when our country enjoys economic prosperity, and a time when we have both a strategic perspective as a leading nation of the world, and also at a time when we the technological potential to do something about it... We do have a window of opportunity, and the Army is embarking on its most significant change in about a century."*

General Eric K. Shinseki, Chief of Staff, Army

### SECTION I INTRODUCTION

#### 5-1. Force development

Force development takes the desired operational capability of the National Military Strategy (NMS) determines Army doctrinal, leader development, training, organizational, materiel and soldier development requirements, translates them into programs and structure, within allocated resources, to accomplish Army missions and functions. Force development brings together people and equipment, forms them into operational organizations to provide units with the desired capabilities for the combatant commander. Force development uses a phased process to translate organizational concepts based on technologies, materiel, manpower requirements, and limited resources into combat capability. The force development process interfaces and interacts with the Joint Strategic Planning System (JSPS) and the Planning, Programming, and Budgeting System (PPBS).

#### 5-2. Relationship to change

**a.** In the context of force development as part of the Army Organizational Life-Cycle Model, we need to understand change as a dynamic process. The elements for change are themselves changing and this fundamentally alters force development. Realizing the *Army Vision* Objective Force mandates that we manage the process of change. The pace of technological advances challenges our ability to envision objective force capabilities and the time required to change the primary long lead elements of the institution: doctrine, materiel, and organization.

**b.** The U.S. Army is a concept-based army that performs its mission within a framework of doctrine. Concepts generate questions and hypothesis about the future, while doctrine provides answers about today. Materiel changes require up to 15 years developing and fielding, organizational change requires 2-8 years, doctrine requires 2-4 years, and leader

development and training follow changes in the other “drivers” by several years. For the future Army to benefit from the synergism of the integrated doctrine, training, leader development, organizations, materiel, and soldier systems (DTLOMS), we must work to shorten development and fielding times, and increase our ability to envision and conceive future warfighting capabilities.

c. This chapter explains the Army force development process (Figure 5-1). Force development is the initiating process of the organizational life cycle of the Army, and is the underlying basis for all other functions. It is a process that consists of defining military capabilities, designing force structures to provide these capabilities, and translating organizational concepts based on doctrine, technologies, materiel, manpower requirements, and limited resources into a trained and ready Army. The five-phased process includes:

- (1) Determine requirements.
- (2) Design organizations.
- (3) Develop organizational models.
- (4) Determine organizational authorizations.
- (5) Document organizational authorizations.

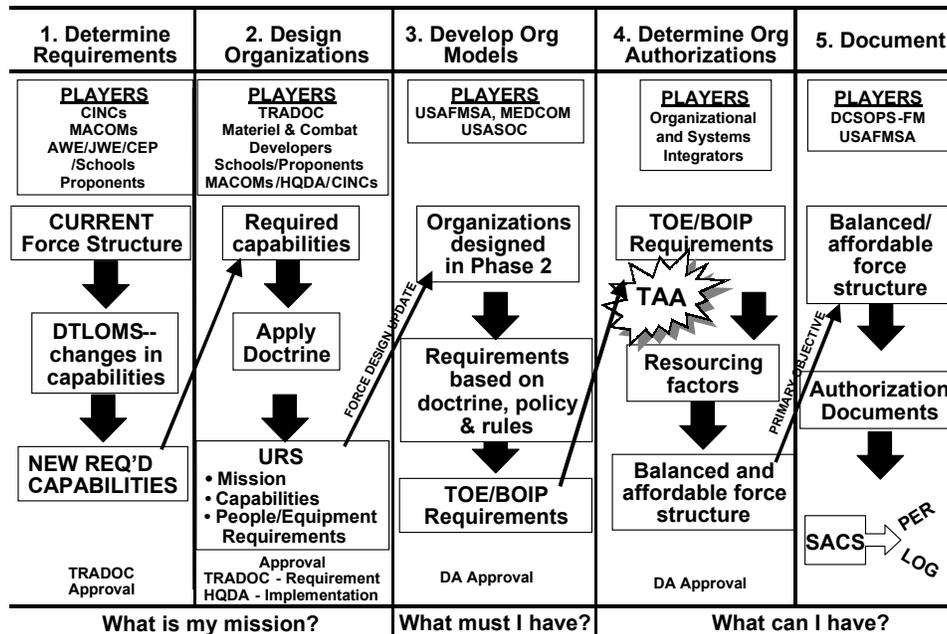


Figure 5-1. Force Development Process

### 5-3. Army force development process

The schematic framework of the force development process as part of the capstone force management process is displayed in the Army force management chart; Figure 2-3 in Chapter 2. This model reflects a system of systems, each of which provides an essential force integration function and, more importantly, how these functions relate to each other. In this network, the processes for determining warfighting requirements, conducting research

and development (R&D), and providing resources all provide input to the force development process. The resulting products of force development, in turn, provide the basis for acquiring and distributing materiel and acquiring, training, and distributing personnel in the Army. It is useful to use the Army force management chart to visualize how each system relates to others and contributes to the accomplishment of each task.

**a. Determine requirements.** The force development process has its roots in the requirements generation process. The requirements generation process identifies the desired operational capability in terms of personnel, equipment, and unit structure. This process begins with national-level guidance (NMS, Joint vision, Defense Planning Guidance (DPG)), guidance from the Army's senior leadership (Army vision, The Army Plan (TAP)), joint warfighting concepts (such as rapid decisive operations, peace enforcement operations), and/or new materiel capabilities evolving from the research, development, and acquisition (RDA) process. U.S. Army Training and Doctrine Command (TRADOC) assesses the future warfighting concepts through a series of analysis, testing, experimentation and studies to gain insights across DTLOMS domains. Using the integrated concept team (ICT) management technique, TRADOC pursues timely involvement of appropriate agencies/expertise to aggressively identify and work issues. TRADOC establishes objective force capabilities (OFCs) as the foundation upon which to base the assessment process. These critical, force-level, measurable statements of operational capability frame how the Army will realize advanced full spectrum operations as stated in the approved capstone concept. The OFCs focus the Army's Science and Technology Master Plan (ASTMP) and warfighting experimentation. As the transformation process unfolds, these force-level objective concepts will give rise to supporting proponent/branch future operational capabilities (FOC) included within subordinate concepts. This assessment process leads to a recommendation by the Commanding General (CG), TRADOC to Headquarters, Department of the Army (HQDA) on how to best fulfill the warfighting requirement. If the capability requires a change in doctrine, training, or leader development TRADOC begins action to meet the requirement upon approval of HQDA Deputy Chief of Staff for Operations (DCSOPS). If the analysis results in a need for change in soldier occupational specialty structure, then the recommendation goes forward to HQDA Deputy Chief of Staff for Personnel (DCSPER) for action. If the required capability needs a materiel solution, TRADOC prepares a material requirements document (MRD) and forwards it to HQDA DCSOPS for consideration by the Army Requirements Oversight Council (AROC). Warfighting concepts requiring organizational solutions move to the next phase of force development.

**b. Design organizations.** As the organizational conceptual requirements begin to clarify, the force development process begins to design organizations. The combat development community develops the proposed organization, and its mission and functions, to meet the required operational capabilities. Organizational solutions to OFCs are captured in a unit reference sheet (URS) in sufficient detail to support Army force design initiatives, and related studies and analyses. After the design has been developed, laid out and analyzed by TRADOC, it moves forward to HQDA in the force design update (FDU). Once approved, this design will be further refined into an organizational model known as a table of organization and equipment (TOE).

**c. Develop organizational models.** The Requirements Documentation Directorate (RDD), U. S. Army Force Management Support Agency (USAFMSA) applies rules,

standards, and guidance to the doctrinally correct design to produce the organizational model, a requirements document, and the definition of a fully mission-capable organization (i.e. an unresourced TOE).

**d. Determine organizational authorizations.** After HQDA approves the TOE, the desired unit enters into the resourcing phase of force development where the organizational model competes for resources in the total Army analysis (TAA) process. The TAA takes into account force guidance and resource availability to produce a balanced and affordable force structure. It determines and/or verifies the affordability, supportability, and executability of the organizational model.

**e. Document organizational authorizations.** After approval of the resourced force structure by Army leadership, USAFMSA manages the process of documentation of the decision. This process results in organizational authorizations documented as modification tables of organization and equipment (MTOE) or tables of distribution and allowance (TDA).

## SECTION II

### PHASE I—DETERMINE REQUIREMENTS

#### 5-4. Requirements determination

Requirements determination begins the Army force development process. Traditionally, that process has fostered competition among DTLOMS domains to develop feasible solutions or to improve the operational shortcomings in the force.

**a.** In recent history, due to leap-ahead technology advances, materiel system solutions captured more attention than changes to doctrine, training/leader development, or organizations thereby creating a potential imbalance or inefficiency in correcting warfighting capability deficiencies. It was felt that the Army should first seek alternative solutions, mainly because of the associated cost and timesaving advantages over materiel development programs.

**b.** TRADOC has the mission to chart the course for the Army to follow to achieve the objective force. Significant aspects of how TRADOC approaches this challenge are:

(1) A holistic approach to determine requirements based on desired Joint and Army warfighting capabilities versus known deficiencies. This approach must consider the full spectrum of Army operations and functions. This is a substantial change from the previous emphasis on Army deficiencies against a single, well-defined threat.

(2) Focus on requirements as a change to any DTLOMS domain, with materiel being the least desirable domain to change because of acquisition costs and schedules.

(3) Requirement of a multidisciplinary team effort. The establishment of ICT will provide that disciplined team effort.

(4) Cost as an independent variable (CAIV) was introduced to insure the preferred solution includes an affordable life cycle cost. The Army cannot expect performance at any cost or have everything it wants. CAIV will not, however, preclude consideration of a new, high potential, leap-ahead technology (often referred to as a “potential silver bullet”).

---

### 5-5. Requirements determination process

The Army continually upgrades and changes the way it fights so it can maintain battlefield superiority over all adversaries and can achieve complementary capabilities with other services and other nations. Requirements are determined holistically and are driven by warfighting concepts focused on the future and on experimentation in our battle labs that will provide us insights to discern viable requirements.

### 5-6. The vision

**a. Joint Vision.** The requirements determination process begins when the Chairman of the Joint Chiefs of Staff (CJCS) issues a Joint vision that provides a conceptual overview of the armed forces for the future. The Joint vision establishes the initial conceptual template for how the forces will channel the vitality of their people and leverage their technological opportunities to achieve new levels of effectiveness in joint warfighting.

**b. Joint concept.** The concept for future joint operations (CFJO) serves as the joint concept document. The CFJO is a rudimentary, abstract description of a desired goal as the CJCS looks at the future battlefield. The CFJO expands the Joint vision's new concepts to provide a more detailed foundation for follow-on capabilities assessments. The CFJO also helps concept developers identify joint desired operational capabilities (JDOCs) and joint future operational capabilities (JFOCs). America's armed forces must be able to shape the strategic environment to prevent war, respond when deterrence fails, and begin now to prepare for an uncertain and challenging future. Toward those ends, the CFJO considers future joint operations in the context of the broad range of challenges anticipated.

**c. U.S. Joint Forces Command (JFCOM) concepts.** The Secretary of Defense (SecDef), in the Joint Warfighting Experimentation Charter, directed the Commander, JFCOM to develop concepts that will provide Joint Staff (JS) guidance to the military. The JFCOM staff has initiated the development of concepts that provide a more detailed view of the CFJO. JFCOM is working through the creation of two categories of subordinate concepts: integrating and supporting.

**d. Transformation to the objective force.** Today, *The Army Vision* provides the broad direction for the transformation of the Army to meet the exceptional challenges of our changing national security environment. *The Army Vision* states the way ahead for transforming our Army as an abstract description of a desired goal and it integrates the Joint vision and Army requirements to accomplish the Army role in that vision. It is influenced by national security and military strategies, with science and technology (S&T) providing a frame of reference. It is a conceptualization that integrates and leverages information technology, redesigns the tactical forces, and re-engineers institutional forces while retaining legacy warfighting capability, by divesting in the near term, while organizing and equipping to operate in the far term. At the same time, *The Army Vision* seeks to develop future capabilities to achieve an end state of an Army that operates across the full spectrum of military operations. The three major thrusts of its focus are depicted in Figure 1-1. The Transformation Campaign Plan captures the details of how we will implement *The Army Vision* across the force.

---

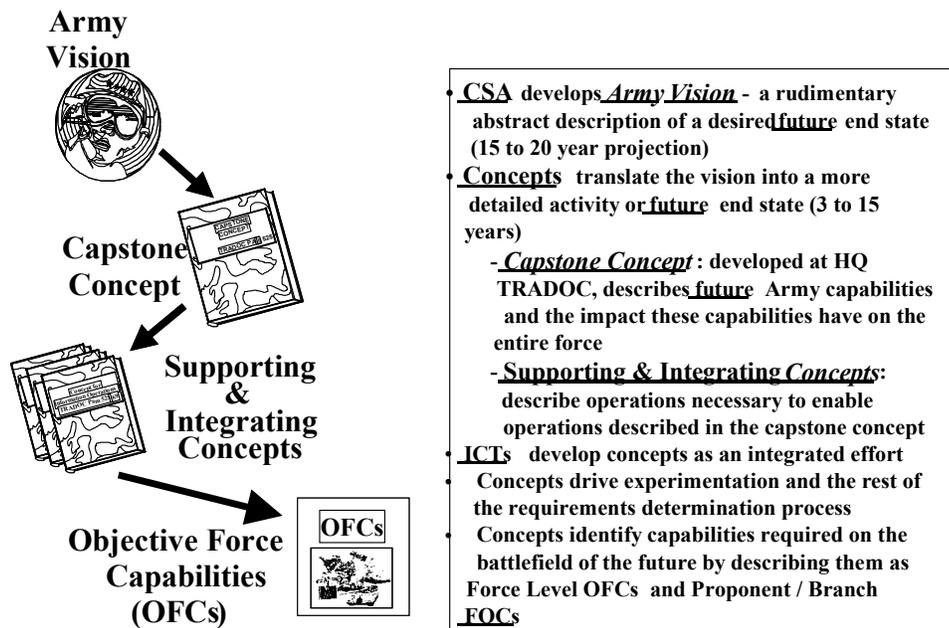
## 5-7. Army warfighting concepts

**a. Capstone concept.** TRADOC translates the vision into a capstone concept. This still abstract, but much more detailed description of future operations is published in TRADOC Pam 525-5, *Advanced Full-Spectrum Operations*. HQ TRADOC forms an ICT to develop the capstone concept. The ICT comprises members from TRADOC, U.S. Army Materiel Command (AMC), other Army commands, HQDA, other military Services, academia, industry, and others—taking advantage of the synergy of the group to translate the commander’s vision into the next level of detail. The capstone concept reflects direct linkage to the NMS, DPG, the Joint vision, TAP, and other documents. In this context, the capstone concept becomes the primary guide for all other Army concept development.

**b. Objective force capabilities (OFCs).** TRADOC establishes OFCs, as measurable force-level statements of operational capability upon which to base the assessment process. OFCs will form the basis for conducting analyses to define and refine requirements across the full spectrum of operations throughout the transformation period. The OFCs focus the ASTMP and warfighting experimentation. They are identified and consolidated in TRADOC Pam 525-66, *Objective Force Capability*, that serves as the control mechanism for requirements determination activities and will provide a cross-reference for all capabilities concepts. All warfighting requirements must have linkage through an OFC to an approved subordinate concept supporting the capstone concept and *The Army Vision*.

**c. Army subordinate concepts.** Because the capstone concept provides a macro-level description of the future Army, it must be enabled by more detailed subordinate concepts, called integrating and supporting concepts. Integrating concepts address requirements in multiple operational environments, whereas supporting concepts amplify a specific function or describe how to employ a system or conduct a task. These concepts further refine the basis for studies, experimentation, analyses, simulations, and testing leading to the determination of DTLOMS solutions to achieve desired capabilities. Army school commandants and center commanders use the ICT approach to develop the integrating and supporting concepts for FOCs.

**d. Future operational capabilities (FOCs).** FOCs are proponent/branch level structured statements of operational capability required by the Army to achieve its goals as stated in approved capstone and subordinate concepts. Currently, they translate the desired capabilities described in *Joint Vision 2020* and *The Army Vision* into the Army’s operational concept for full spectrum operations. FOCs bridge near term force capabilities with the Army’s Objective Force development process. FOCs focus research, provide a clear hypothesis for test and experimentation, and lead to the balanced development of solution sets in DTLOMS. FOCs must be stated in sufficient detail to allow measurement of success and to prioritize resources, thus encouraging materiel and combat developers to pursue only relevant technology applications to DTLOMS domains. Figure 5-2 depicts this process.

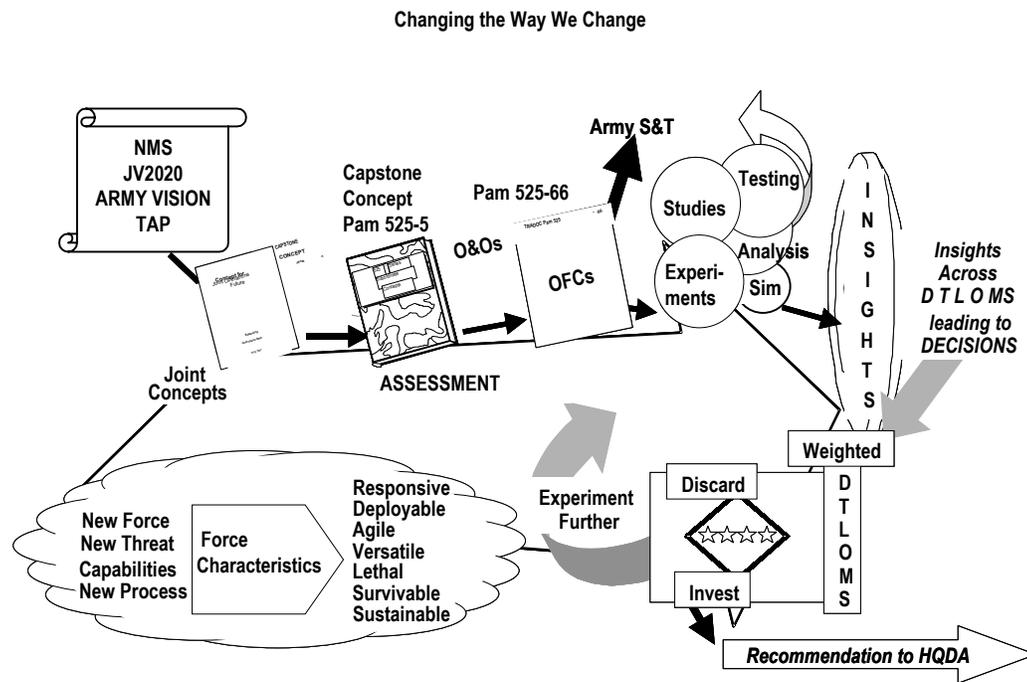


**Figure 5-2. Army Concept Development**

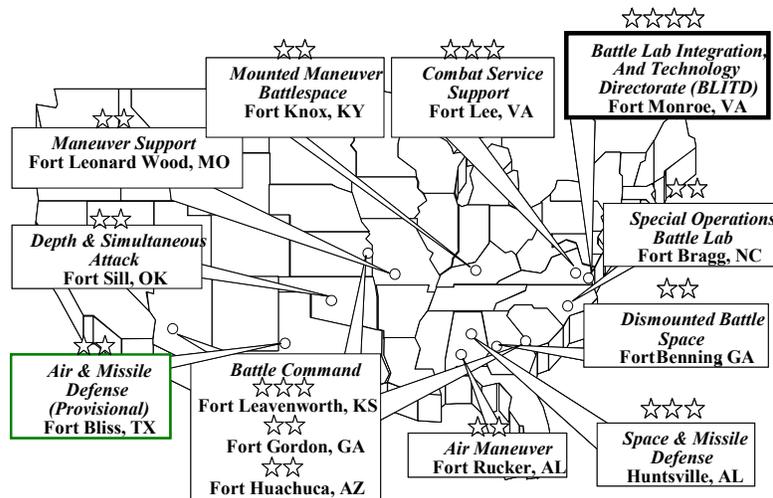
### 5-8. Experimentation, simulation and analysis

Warfighting experiments, simulations and analysis are key to the requirements determination process. When properly planned and executed, warfighting experiments, simulations and analysis give the Army an unsurpassed means to understand future warfighting capabilities requirements. Progressive and interactive mixes of constructive, virtual, and live experiments combined with operational experience and appropriate analysis yield insights to better define not only warfighting concepts but also requirements across the spectrum of DTLOMS. Modern simulations allow the Army to look at current and future force capabilities and compare the contributions of alternative solutions. The Army S&T program determines the warfighting value of individual efforts of material developers relative to OFCs (Figure 5-3). For more detail on Army S&T see Chapter 11.

**a. Battle labs.** Battle labs were formed to help refocus the force, experiment with new methods for determining new requirements and to develop capabilities for future warfighting concepts. The principal role of the battle labs of the future will be to plan for and conduct warfighting experiments in support of the requirements determination process (Figure 5-4).



**Figure 5-3. Requirements Determination Process**



**Figure 5-4. Battle Labs**

(1) There are four main categories of warfighting experiments; concept experiments, limited objective experiments (LOEs), advanced warfighting experiments (AWEs), and joint warfighting experiments (JWEs). The overwhelming majority are warfighting concept experiments pertaining to individual operations and branches.

(2) Battle labs create an institutional link between emerging technologies and warfighting ideas (concepts) to foster the intellectual leap from the technologically plausible

to the development of warfighting requirements and attainment of warfighting capabilities. Battle lab information supports HQ TRADOC's input to develop and revise the Army modernization plan (AMP), and the ASTMP.

**b. Army Science and Technology Master Plan (ASTMP).** The ASTMP is a strategic plan for the technology base, which synthesizes national, Department of Defense (DOD), and Army top-down guidance to the S&T community. The ASTMP provides an underpinning concept and a vision of future constraints by applying realistic funding limits. ASTMP is a vital link between DOD technology objectives, planning, and force modernization efforts. It provides a road map of how Army R&D funds support the AMP. It lists Army S&T objectives and advanced technology demonstrations.

**c. Army modernization plan (AMP).** The AMP, produced by HQDA Office of the Deputy Chief of Staff for Programs (ODCSPRO), is the link to the resourcing process out of the materiel requirements determination process. This key document articulates the Army's modernization vision for the future force. It translates vision into a strategy for near-to-mid-modernization of the Army. The AMP sets the foundation for programs and modifications further defined in the research, development, and acquisition plan (RDAP) to compete for resourcing in the Planning, Programming, Budgeting, and Execution System (PPBES).

#### 5-9. DTLOMS requirements

Requirements assessment and determination occurs in the sequence: doctrine, training, leader development, organization, soldiers and materiel. (D-T-L-O-S-M) based on expense and timeliness to field a capability. TRADOC Pam 71-9 outlines the process.

**a. Link to the doctrine development process.** Doctrine evolves as a body of thought that consolidates the Army's collective wisdom regarding past, present, and future. Doctrinal publications capture how the Army fights and conducts operations. Doctrine reflects an application of required and attainable capabilities for fighting on today's battlefield. TRADOC Regulation 25-32, The Doctrine and Literature Master Plan (DLMP), includes tactics, techniques, and procedures (TTPs) that provide branch chiefs and proponents, the "how" of doctrine focus. Branch chiefs and proponents, provide to the Deputy Chief of Staff for Doctrine, HQ TRADOC, a detailed, prioritized description of near-term to far-term required doctrine capabilities. The development of both concept and doctrine is restricted by the executable and the imaginable. Technology can provide capabilities that then drive concept and doctrine.

**b. Link to the training/leader development process.** Training/leader development capabilities identified will be evaluated at every stage of the process, ensuring that the combined arms training strategy (CATS) interfaces with the requirements determination process. System training device requirements are incorporated into the specific system management decision packages (MDEP) and applicable AMP annexes. Training and leader development requirements identified by branch chiefs and proponent assessments are provided to the Deputy Chief of Staff for Training, HQ TRADOC. For more detail see Chapter 15, Army Training.

**c. Link to the organizational development process.** Organizational capabilities required are identified through branch chiefs' and proponents' continuous assessments on how to meet combatant commander requirements. The FDU process ensures the integration

of force planning with all other force development issues that are then prioritized in the TAA process to meet overall Army force program requirements. This chapter explores this process in detail in later sections.

**d. Link to the soldier and human resource management process.** Changes in organizations and structure change the requirements placed upon the systems that recruit, retain, and manage military personnel. Manpower managers deal with human resource requirements from the perspective of the organizational structure in which they will be most efficiently and economically used. For more detail see Chapters 13 and 14.

**e. Link to the materiel development process.** A materiel solution begins only when the operational capability cannot be achieved through the other domains of DTLOMS. The experimentation, simulation, and analysis process refines the materiel solution. These analyses continue into the Concept and Technology Development Phase of the materiel acquisition life cycle and have residual effect out to the Milestone C – Low Rate Initial Production decision. The documented results of these analyses support the mission need statement (MNS), the analysis of alternatives (AoA), the development of the operational requirements document (ORD) and structuring the acquisition program baseline (APB). The AoA determines operational effectiveness and costs for all alternatives by looking at the relative contribution each alternative makes to force effectiveness. The AoA also identifies trade-offs among cost, performance and schedule. Materiel solutions are examined in an organizational context and can drive changes to organizations, soldier skills, leader skills, and training requirements as well as sustainment and logistics support requirements. Requirements for new materiel emerging from the requirements determination process follow the DOD, CJCS and army guidance for development of materiel operational requirements documents. For more detail see Chapter 11.

### SECTION III

#### PHASE II—DESIGN ORGANIZATIONS

##### 5-10. Organization design

Organizational requirements are derived from the continuous assessments conducted by the branches and functional proponents to identify whether a new or modified organization is required on tomorrow's battlefield. Once identified, organizational requirements then are documented through a series of connected and related development processes: URS development; FDU process; TOE development; basis-of-issue plan (BOIP) development, and TAA. Every process may not always be required before organizational changes are made to the force structure.

##### 5-11. The organization design process

**a.** Organizations have their beginnings in warfighting concepts that are connected to the overarching concept. They provide the basis for the proposed organization and address a unit's mission, functions, and required capabilities. The combat developers at TRADOC proponent schools, the Army Medical Department Center and School (AMEDDC&S), and the U.S. Army Special Operations Command (USASOC) develop new designs or correct deficiencies in existing organizations by developing branch or functional concepts. The TRADOC Commander is responsible for the integration and approval of the concepts

developed by the respective proponent school. Branch/ functional concepts normally address:

- Missions, functions, capabilities, and limitations.
- Command and control linkages.
- Individual, collective, and leader training requirements.
- Sustainment; both in field and garrison.
- Doctrinal impacts.
- Impacts on materiel programs.

**b.** Organizational solutions to meet desired capabilities require the development of a URS. The URS ultimately leads to a TOE. The URS can be likened to a rendering or architectural drawing of the new or changed organization. It does not show every “nut and bolt” but it must contain sufficient data about a unit’s personnel and equipment to be used to support Army force design initiatives and related studies and analyses. Personnel and equipment should be developed as accurately as possible and refined throughout the process. The URS must contain the proposed personnel requirements by job title, grade and quantity. It must include major equipment requirements to include nomenclature and quantity, and a breakout of the organization elements with related personnel and equipment requirements. Also included is a summary that captures other relevant data such as unit title, design description, mission, assignment, tasks, assumptions, limitations, mobility requirements, and concept of operations.

#### **5-12. The force design update (FDU)**

**a.** The organization proponent (the service school commandant) forwards the design to the Force Design Directorate (FDD) of the Office of the Deputy Chief of Staff for Combat Developments (DCSCD) at HQ TRADOC for entry into the FDU process.

**b.** The FDU is a semi-annual process used to develop consensus within the Army on new organizations and changes to existing organizations and to obtain approval and implementation decisions (Figure 5-5). FDU issues are organizational solutions to desired capabilities and other improvements to existing designs in which other doctrine, training, leader development, or soldier solutions were insufficient. The FDU process is not a resourcing tool, however it may have impacts in other DTLOMS domains. The FDU serves as the link between the development of the URS and the development of the TOE. During the FDU process the URS is staffed throughout the Army to include the Commanders-in-Chief (CINCs) and other major Army commands (MACOMs). HQDA makes force structure implementation (resourcing/prioritization) decisions. Force design issues that do not have an offset within current force structure will go through a HQDA level force feasibility review (FFR). FFR is an event driven forum that reviews force structure issues and the impacts of force structure decisions. The ARSTAF analyzes the force, to assure it is affordable, supportable and sustainable. At the macro level, within the limits of personnel and budgetary constraints, the FFR determines if the force can be manned, trained, equipped, sustained, and stationed. The FFR may provide alternatives based on prior initiatives, unalterable decisions from the Army leadership or program budget decisions (PBDs). The FFR can result in one of three decisions. HQDA can decide to implement the change and find resources, return it to TRADOC for further analysis, or prioritize the issue for resourcing in the next TAA.

Depending on the sensitivity, visibility, or resource impacts of an organization design/FDU issue the implementation decision may go to the Chief of Staff, Army (CSA) or Vice Chief of Staff, Army (VCSA) for approval.

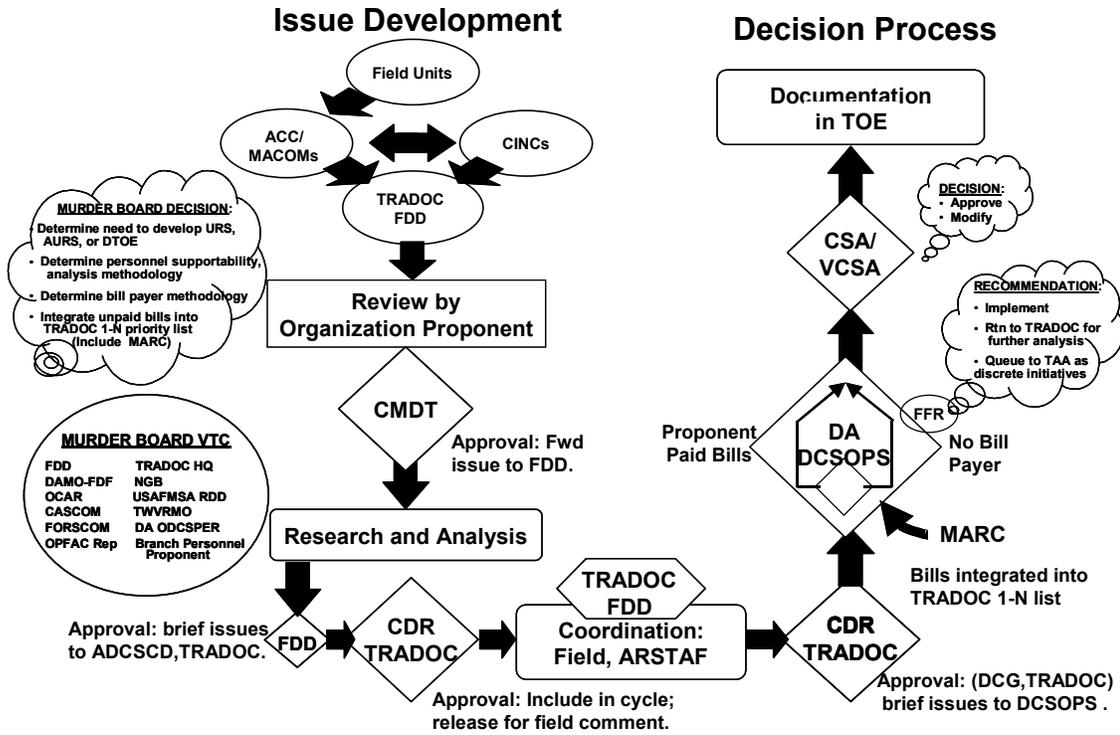


Figure 5-5. Force Design Update (FDU)

**SECTION IV  
PHASE III—DEVELOP ORGANIZATIONAL MODELS**

**5-13. TOE and BOIP developers**

a. Organizations designed in the preceding phase become the start point for the next phase. Following approval of the URS during the FDU process, the design is handed-off to the USAFMSA for documentation as a TOE. The USAFMSA, RDD develops TOEs and BOIPs codifying the input from the URS basic design.

b. TOEs and BOIPs are developed using an Army-wide development system and database called the Requirements Documentation System (RDS). A successor system to RDS called the Force Management System – Requirements (FMS-R) is currently undergoing development. The prototype is scheduled to be operational during calendar year 2001. FMS-R will feature a relational database and many rule-based automated assists to capitalize on available technology to improve and standardize the development processes. FMS-R is the first part of an overarching automation system development project that will ultimately replace the existing systems for developing, documenting, accounting, and managing requirements and authorizations. This new Force Management System (FMS) will become the Army's single database for requirements and authorizations information.

c. Although the organization design phase and organization model development phase are depicted as separate processes, they are closely related and often conducted very nearly concurrently. The proponent organization designers and the USAFMSA TOE developers work closely to ensure that the designs reflect requirements consistent with doctrine and policy and include all the elements necessary to provide an organization fully capable of accomplishing its doctrinal mission. The approved organization design should capture personnel and equipment requirements as accurately and completely as possible.

#### **5-14. TOE description**

a. A TOE prescribes the doctrinal mission, required structure, and mission essential wartime manpower and equipment requirements for several levels of organizational options for a particular type unit. These organizational options provide models for fielding a unit at full or reduced manpower authorizations if resource constraints so mandate. A TOE also specifies the capabilities (and limitations or dependencies) the unit has to accomplish its mission.

b. TOEs are the basis for developing authorization documents and are a vital input for determining Army resource requirements for use by force managers. In addition, these unit models establish increments of capability for the Army to develop an effective, efficient, and combat-ready force structure.

c. The TOE is a collection of related records in the RDS database. There are a variety of records to include narrative information, personnel requirements, equipment requirements, paragraph numbers and titles, and changes in the form of BOIP records to name a few. A TOE consists of base TOE (BTOE) records, related BOIP records, and an incremental change package (ICP) header.

d. A TOE is normally developed in three levels of organization based on the manpower requirements necessary to achieve the following percentage levels: 100 percent (level 1) (minimum essential wartime requirement), 90 percent (level 2), and 80 percent (level 3). Equipment quantities for levels 2 and 3 are equal to level 1 except for individual equipment such as protective masks, bayonets, individual weapons, and tool kits issued to mechanics and repairers. Quantities of these individual equipment items are adjusted to correspond to personnel strength levels. As TOE level 1 is the wartime requirement, it is what is reflected in the "required" column of the authorization document (MTOE). TOE levels 2 and 3 are provided as models of a balanced organization available for use during the processes of determining and documenting authorizations. TOEs provide a standard method for documenting the organizational structure of the Army.

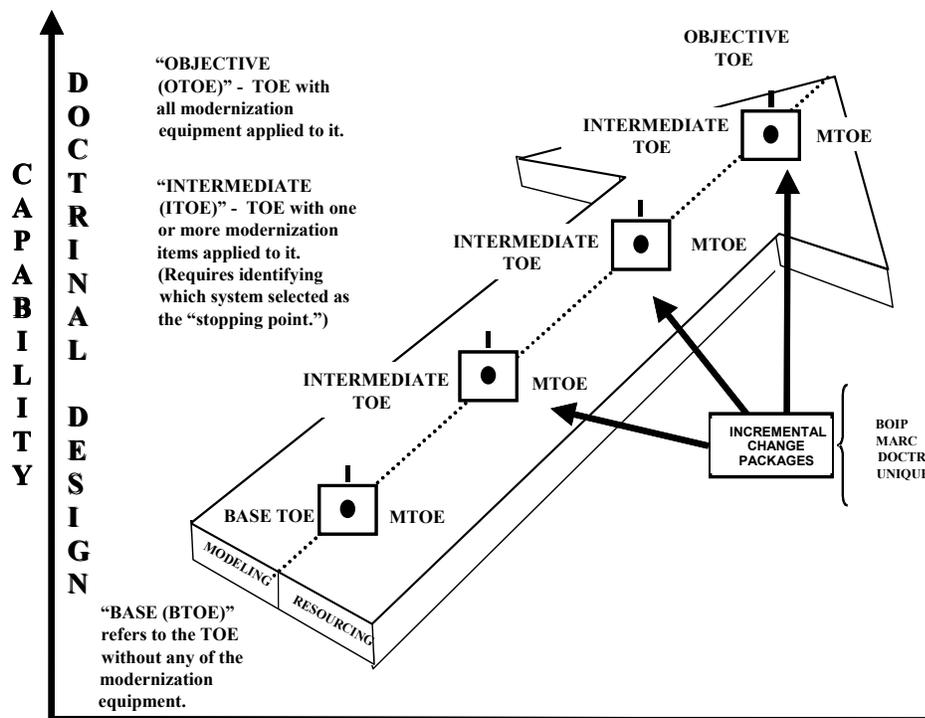
e. FDU decisions, branch proponent input, and MACOM issues, along with force design guidance, developed during capabilities analyses, provide TOE developers with recommended TOE additions/modifications. The missions and probable areas of use of a unit are provided by policy and doctrine. Policy includes guidance, procedures, and standards, in the form of regulations, on how to develop TOEs. Policy published in the DA PAM 611-21 also contains standards of grade (SG), duty titles, and guidance for occupational identifiers (area of concentration (AOC), military occupational specialty (MOS), skill identifier (SI), special qualification identifier (SQI), and additional skill identifier (ASI)) used in the development of requirements documents. Doctrine describes

how each type of unit will perform its functions and details the mission and required capabilities.

f. TOE developers consider the unit mission and required capabilities when applying equipment utilization policies, manpower requirements criteria (MARC), standards of grade (SG), and BOIPs, to develop the proper mix of equipment and personnel for an efficient organizational structure. Resource constraint guidance is considered during the development of draft TOEs to ensure that a unit organized using a BTOE can perform its mission using resources available in the inventory.

**5-15. Incremental TOE system**

The Army uses an incremental TOE system that reflects personnel and equipment modernization over time that reflects how the Army actually conducts its organizational and force modernization business. The incremental TOE system illustrates enhancements to the capabilities or increases to the productivity of an organizational model through the by application of related doctrinally sound personnel and equipment changes (BOIPs) packaged in separately identifiable ICPs. This process is illustrated in Figure 5-6. The incremental TOE begins with a doctrinally sound BTOE and, through the application of ICPs, can provide a series of intermediate TOEs (ITOE) up through a fully modernized objective TOE (OTOE). The TOE is the basis for force programming and becomes an authorization document (MTOE) when resources, specific unit designations, and effective dates for the activation or reorganization are approved at HQDA. The incremental TOE system consists of the following components:



**Figure 5-6. Modernization Over Time (Resource Driven)**

**a. Base TOE (BTOE).** The BTOE is an organizational model design based on doctrine and equipment currently available. It is the least modernized version of a type of organization and identifies mission-essential wartime requirements (MEWR) for personnel and equipment.

**b. Incremental change package (ICP).** An ICP is a doctrinally sound grouping of related personnel and equipment change documents (BOIPs) that is applied to a BTOE or ITOE to provide an enhanced capability, increased productivity, or modernization that results in a new ITOE or an OTOE.

**c. ICP header.** The ICP header is a listing of all ICPs for a specific type of organization in the sequence of intended application. It depicts a unit's doctrinal modernization path (MODPATH). The MODPATH is standardized by unit type.

**d. Intermediate TOE (ITOE).** The ITOE is a transition TOE that results from applying one or more ICPs to a BTOE (or to an ITOE) to produce an enhanced capability. ITOEs form the bridge between BTOE and OTOE and provide the primary tool for programming, executing, standardizing, and documenting the force structure during phased modernization.

**e. Objective TOE (OTOE).** The OTOE is a fully modernized, doctrinally sound organizational model design achieved by applying all DA-approved ICPs. The OTOE sets the goal for planning and programming of the Army's force structure and supporting acquisition systems.

#### **5-16. TOE review and approval**

**a.** The TOE development and revision process is controlled by the annual Army TOE development plan (ATDP). A draft plan is prepared by USAFMSA and submitted to HQDA (Office of the Deputy Chief of Staff for Operations and Plans (ODCSOPS)) for review and approval. The HQDA approved plan identifies specific TOEs to be developed or updated during a six-month period.

**b.** A TOE in the revision, development, or staffing process and not yet DA approved is called a draft TOE (DTOE). DTOEs are reviewed by USAFMSA and coordinated with appropriate commands, agencies, and activities during an area-of-interest (AOI) review. After AOI review USAFMSA makes final changes prior to the responsible ODCSOPS organization integrator (OI) presenting the DTOE to Director, Force Management for approval. Following approval, the DTOE status is changed to "DA approved" in the RDS database. It will subsequently be included in the consolidated TOE update (CTU) file.

**c.** TOEs are scheduled for revision in the ATDP to accommodate changes in doctrine, introduction of new or improved equipment, or to incorporate more effective organizational designs. Development of new TOEs is scheduled to accommodate requirements for new organizations. If a TOE is not scheduled for revision or replacement by a new TOE, it will normally be scheduled for cyclic review every three years.

#### **5-17. Consolidated TOE update**

BOIPs and TOEs, or changes thereto, are published once a year in the CTU file distributed by USAFMSA-RDD. Information from this file is used by USAFMSA Authorizations

Documentation Directorate (ADD) to update the requirements information contained in authorization documents for tactical units (MTOE), and to refine planning and program data for the future fielding of new equipment.

#### **5-18. Basis-of-issue plan (BOIP)**

**a.** A BOIP is a requirements document that states the planned placement of new or improved items of equipment and personnel in TOEs at 100 percent of wartime requirements. It reflects quantities of new equipment and associated support items of equipment and personnel (ASIOEP), as well as equipment and personnel requirements that are being replaced or reduced. In addition to its use for TOE development/revision, it is used by HQDA for logistics support and distribution planning for new and improved items entering the Army supply system. Materiel developers (MATDEVs) (program executive officers (PEOs)/program managers (PMs), AMC, and USASOC communities) use it as input for concept studies, life cycle cost estimates, and trade-off analyses during the system development and demonstration phase of the R&D process.

**b.** A BOIP provides personnel and equipment changes required to introduce a new or modified item into Army organizations. The development of a BOIP can play an integral part in TOE development. A BOIP is developed to place a new or substantially changed materiel item into organizations along with associated equipment and personnel to maintain and operate it as specified in the ORD and the basis-of-issue feeder data (BOIPFD).

**c.** BOIPFD, prepared by the MATDEV, contains a compilation of organizational, doctrinal, training, duty position, and personnel information that is incorporated into the BOIP. The information is used to determine the need to develop or revise military occupational specialties and to prepare plans for the personnel and training needed to operate and maintain the new or improved item. The BOIPFD also forms the basis for the operator and maintainer (O/M) decision. The O/M decision is the responsibility of PERSCOM. The BOIP process begins when the MATDEV receives an approved and resourced ORD. The project manager and/or MATDEV develops BOIPFD, then obtains a developmental line item number (ZLIN) and standard study number (SSN) from AMC.

**d.** The BOIPFD is submitted via the Total Asset Visibility (TAV) system to USAFMSA where the information is reviewed for accuracy, continuity, and completeness prior to the formal development of the BOIP. During staffing, the training impacts associated with the BOIP equipment and the associated personnel requirements are developed. If the O/M decision includes an occupational identifier (AOC, SI, MOS, SQI, or ASI), the personnel proponent must prepare a proposal per AR 611-1 for submission to PERSCOM to revise the military occupational classification and structure. USAFMSA requests TDA requirements for new or modified items from the MACOM and TDA requirements are entered into the BOIP at UIC level. It should be noted that BOIPs are not developed for TDA-only equipment. When the BOIP is complete, it is submitted to DA for approval. The systems integrator (SI) is responsible for HQDA staffing and for presenting the BOIP to the Director, Force Management in the Office of the Assistant Deputy Chief of Staff for Operations and Plans -- Force Management (OADCSOPS-FM) for approval. USAFMSA publishes approved BOIPs in the CTU released in April of each year.

e. There may be several iterations of the BOIP: an initial BOIP, developed during system development and demonstration, and amended BOIPs, which are based on updated information provided by the MATDEV as required. A BOIP may be amended at any time during system development and fielding when new or changed information becomes available.

## **SECTION V**

### **PHASE IV—DETERMINE ORGANIZATIONAL AUTHORIZATIONS**

#### **5-19. Determining organizational authorizations**

a. The fourth force development phase, determining organizational authorizations, provides the mix of organizations, resulting in a balanced, and affordable force structure. Force structuring is an integral part of the OSD Planning, Programming, and Budgeting System (PPBS) and the JSPS. It is the resource-sensitive process portrayed in the Provide Resources section of the Army Force Management Chart at Figure 2-3. It develops force structure in support of joint, strategic, and operational planning and Army planning, programming, and budgeting. The development of a force is based on an understanding of the objectives to be achieved, threats, and externally imposed constraints (e.g., dollars, end strength, roles, and missions).

b. The determination of the size and content of the Army force structure is an iterative, risk-benefit, trade-off analysis process, not all of which is exclusively within the purview of the Army. The NMS describes the strategic environment, develops national military objectives, and describes the military capabilities required to execute the strategy. The NMS also addresses the force structure requirements for the Navy, Air Force, Marine Corps, Coast Guard, Special Operations Command, and Reserve Components (RC). The Quadrennial Defense Review (QDR) report addresses the total force required to implement the President's national security strategy and the supporting NMS at prudent military risk.

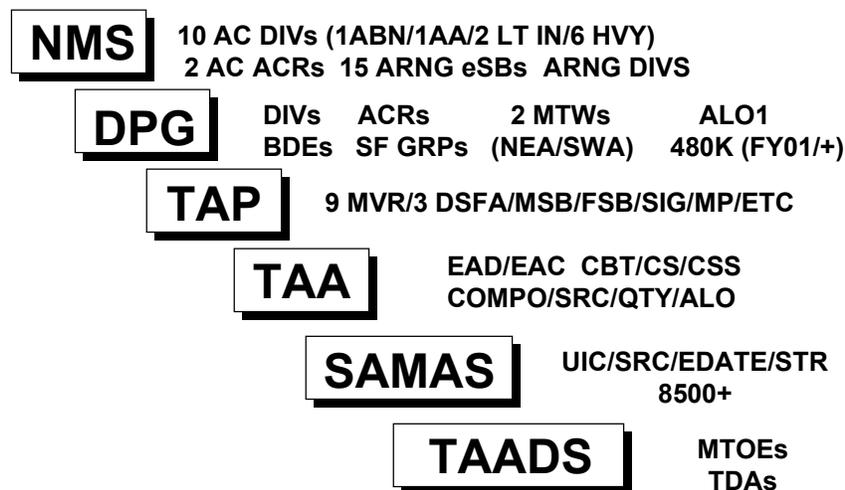
c. The SecDef provides policy, articulates strategic objectives and the National Military Strategy, and provides force and resource guidance to the Services, other DOD agencies, and to the combatant commanders through the DPG. Based on the DPG, the Services prepare their POM. For the Army, the DPG directs the number and type of major units such as corps and divisions, and an end-strength constraint. With additional information provided on separate brigades, armored cavalry regiments and Special Forces groups, this guidance identifies the "operating forces." The DPG further defines the major theater wars (MTWs) and small scale contingencies (SSC) the Army must address, identified in the illustrative planning scenarios (IPS).

d. The NMS, DPG and QDR constitute some of the JCS/DOD directives and constraints imposed upon Army force structure. TAP, the principal Army guidance for development of the Army program objective memorandum (POM) submission, articulates the CSA and SA translation of the JCS/DOD guidance to all Services into specific direction to the ARSTAF and MACOMs for the development of the Army POM, and the TAA process. The TAP, a HQDA ODCSOPS document, defines the types and quantities of units within the "operating forces." The TAA process validates the Army's combat requirements (MTOE), generates the Army's support requirements (MTOE), and captures the Army's generating force

requirements (TDA), and resources the force (MTOE & TDA, all components). TAA develops the echelons above division/echelons above corps (EAD/EAC) combat (CBT), combat support (CS), combat service support (CSS) and TDA force structure, referred to as “generating” forces, required to support the “operating” force structure. TAA then resources the requirements based on Army leadership directives, written guidance, risk analysis, and input from the CINCs day-to-day requirements. The resulting force structure is the POM force, forwarded to the Office of the Secretary of Defense (OSD) with a recommendation for approval. When Congress approves the budget, all approved units are programmed in the Structure and Manpower Allocation System (SAMAS) and documented in The Army Authorization Documents System (TAADS) (Figure 5-7).

**5-20. Total Army analysis (TAA)**

a. TAA is the acknowledged and proven mechanism for explaining and defending Army force structure. It takes us from the Army of yesterday to the Army of the future. It requires a doctrinal basis and analysis; flowing from strategic guidance; and joint force requirements. TAA is a biennial process initiated during even-numbered years. The purpose of TAA is to define the required “generating” forces, necessary to support and sustain the DPG “operating” forces. The determination of the size and content of the Army force structure is an iterative, risk-benefit, trade-off analysis process. The POM force, the force recommended and supported by resource requests in the Army POM, as part of the future years defense program (FYDP), is developed during the TAA process. TAA determines the force for each program year. It has Army wide participation, including CSA decision and SA approval.



**Figure 5-7. NMS to MTOE**

b. The TAA principal products are:

- The Army's total warfighting requirements.
- The defined, required support forces (EAD/EAC).
- The force resourced against requirements and budgetary constraints.
- Army structure (ARSTRUC).message

- The initial POM force.
- c. TAA objectives are to:
  - Develop, analyze, determine and justify a POM force, aligned with the DPG and TAP. The POM is that force projected to be raised, provisioned, sustained, and maintained within resources available during the FYDP.
  - Provide analytical underpinnings for the POM force for use in dialogue among Congress, OSD, JS, CINCs and the Army.
  - Assess the impacts of plans and potential alternatives for materiel acquisition, the production base, and equipment distribution programs on the projected force structure.
  - Assure continuity of force structure requirements within the PPBS and PPBES.
  - Provide program basis for structuring organizational, materiel, and personnel requirements and projected authorizations.

### **5-21. The TAA process**

TAA supports the fourth force design phase that determines the mix of organizations that comprise a balanced and affordable force structure.

a. TAA is the resource sensitive process that executes the decisions of the OSD, the DOD PPBS, directives and initiatives of the JS, and the Army PPBES. TAA serves as the bridge between OSD/JS guidance and the Army's planning and program building processes, balancing the Army's force structure requirements (manpower and equipment) against available and planned resources. The Army's strategic roles must support the NMS. These roles have a major impact on the shaping of the Army. Therefore, TAA develops a force that meets the NMS, defeats the threat, within the defined scenarios, under the established dollar constraints, and fulfills all the roles and missions listed, within the parameters of congressional oversight and guidance.

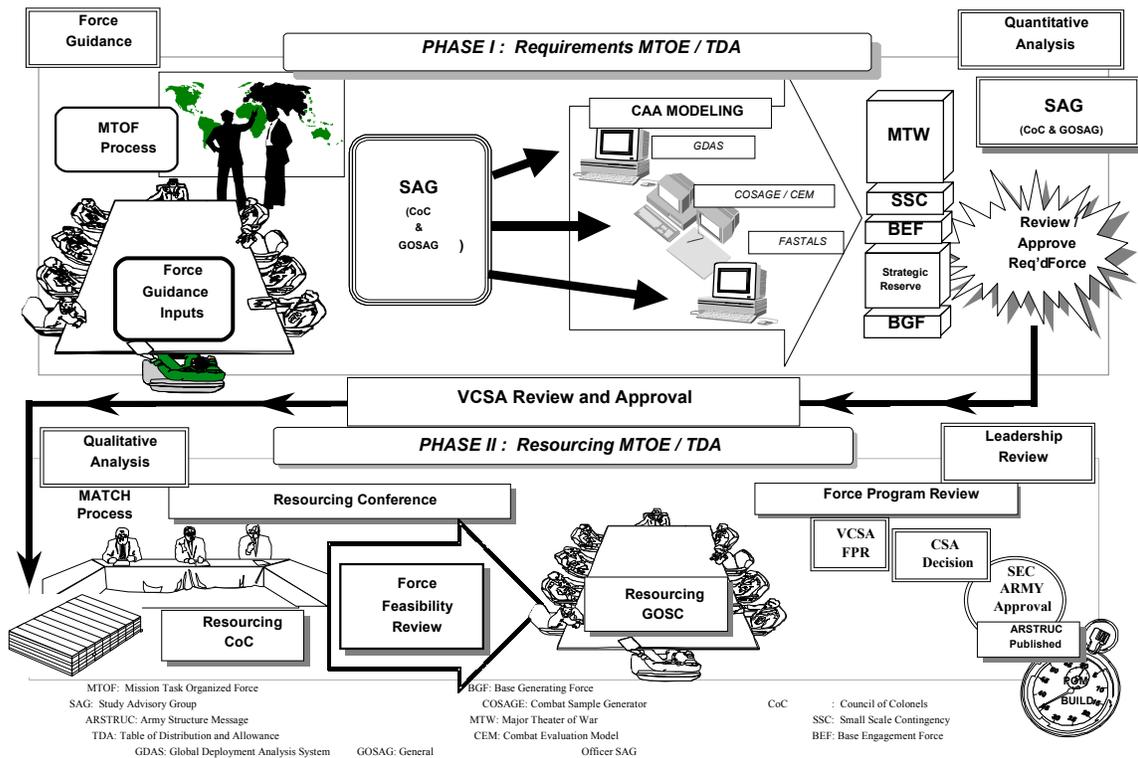
b. Additionally, the TAA process is the means to transition from the planning phase to the programming phase within the Army's PPBES, assisting in determining, verifying and justifying Army requirements, while assessing force capabilities. The TAA process is flexible and responsive to dynamic changes. The process flows from internal Army actions, decisions and guidance (for example: allocations rules, resource assumptions, warfighting capabilities, and infrastructure priorities), and from external inputs from the National Command Authorities (NCA), CJCS, JS, OSD, and CINC priorities (for example: anticipated threats, scenarios, and assumptions). The Army develops the POM force to achieve an affordable and competent force capable of best supporting national objectives and CINC warfighting needs. This force supports the joint strategic planning conducted by the JS, CINC and the Services at the transition between planning and programming. The mix of unit models that make up a balanced and affordable force structure must support Joint and Army planning, programming, and budgeting at the strategic, operational and tactical levels.

c. TAA is a multi-phased force structuring process. It consists of both qualitative and quantitative analysis designed to develop the MTOE and TDA "generating" forces necessary to sustain and support the divisional and non-divisional combat forces delineated in the DPG, the IPSs, and the TAP.

d. Figure 5-8 depicts the sequence of activities in the TAA process. TAA is a two-phased analytical and subjective process consisting of Requirement Determination (force guidance and quantitative analysis) and Resource Determination (qualitative analysis and leadership review).

**5-22. Phase I. Requirements Determination**

Requirements determination is made up of two separate actions: force guidance and quantitative analysis. Phase I is the more critical of the two phases. Accurate planning, consumption and workload factors, threat data, and allocation rules ensure accurate computer developed requirements.



**Figure 5-8. Total Army Analysis Process**

a. **Force guidance.** Force guidance consists of data inputs and guidance from various sources. The DPG and TAP provide the NMS objectives, threat data, and resource assumptions and priorities. The DPG also directs the Army to maintain a specific number of combat organizations. The April 2000 DPG, for example, directs the Army to maintain a specific number of Active divisions (both heavy and light), and a specific number of Army National Guard (ARNG) divisions and enhanced separate brigades. The IPS provides DOD directed scenarios called MTWs and SSCs. DPG/IPS also specify the quantity and type of combat forces (corps, divisions, separate brigades, armored cavalry regiments, ranger battalions, and special forces groups) for employment in each scenario. These specific combat forces are referred to as “operating” forces. They constitute the start point for force structuring activities. ODCSOPS-SSW (War Plans) and ODCSOPS-FMF (Force Structure)

---

determine the specific identification, size, and composition of the “operating” forces in accordance with TAP force structure guidance.

**(1) Data and guidance inputs.**

**(a)** Mission task organized force (MTOF). A ready structured force possessing balanced capabilities that are adaptable for missions against one or more multi-faceted threat(s). MTOFs are linked to the NMS. The NMS assigns future missions, which in turn generates future requirements. These MTOF requirements are developed using a “strategy-to-task” process. The tasks in this process are for the most part based on the universal joint task list (UJTL). Other MTOFs are generated from specific CINC requirements, working groups and workshops and other relevant documents. ODCSOPS-SSW has staff responsibility for MTOFs.

**(b) Parameters, planning and consumption factors and assumptions.**

**1** Office of the Deputy Chief of Staff for Logistics (ODCSLOG), TRADOC, U.S. Army Combined Arms Support Command (CASCOM), the theater MACOMs and other elements of the HQDA staff (ODCSPER, ODCSOPS and ODCSPRO) provide specific guidance, accurate and detailed consumption factors, planning factors, doctrinal requirements, unit allocation rules, weapons and munitions data and deployment assumptions. The parameters, factors and assumptions are needed to conduct the series of modeling and simulations iterations to develop and define the total logistical support requirements necessary to sustain the combat force(s) in each MTW or SSC.

**2** The parameters, factors and assumptions contain theater-specific information concerning logistics and personnel planning, consumption and workload factors, host-nation support offsets and other planning factors crucial to theater force development. A critical step the Force Guidance development is the update and revision of the planning and consumption factors and assumptions.

**(c)** Allocation rules. Another critical step during the force guidance development is the review and updating of support force unit allocation rules used by the U.S. Army Center for Army Analysis (CAA) during the modeling process (quantitative analysis).

**1** These allocation rules, developed by TRADOC and the functional area proponents, represent a quantitative statement of each type of CBT/CS/CSS unit’s capability, mission, and doctrinal employment. Allocation rules are machine-readable; normally an arithmetic statement that incorporates the appropriate planning factors. They are adjusted as necessary to incorporate theater-specific planning factors. There are three basic types of rules:

- Direct input (manual) that are stand-alone requirements for a unit in a theater.
- Existence rules that tie a requirement for one unit to another.
- Workload rules that tie unit requirements to a measurable logistical workload.

**2** The allocation rules need modification whenever unit TOEs, scenario assumptions, logistical support plans, or doctrinal employment concepts change.

**3** Study advisory groups (SAGs), attended by Army Staff (ARSTAF), support agencies, MACOM and proponent representatives, ensure all allocation rules are appropriate and approved for use in the current DPG scenarios.

**(2) SAGs.** SAGs are decision forums where all the parameters, constraints, data inputs and guidance are identified and approved for inclusion in the current TAA cycle and CAA models.

**(a)** There are two types of SAGs: council of colonels (COC) and general officer (GOSAG). ARSTAF, MACOMs, TRADOC schools and field operating agencies (FOAs) participate in the COC forums. The very senior leadership of the Army participates in the GOSAG. The SAG COC ensures all data input and guidance is appropriate and approved for use in the current DPG scenario(s). The GOSAG addresses those issues that were unresolved at the SAG COC and approves all assumptions, planning factors, allocation rules and guidance as inputs for the second part of Phase I, the CAA modeling.

**(b)** SAGs are computer event driven. SAG forums are scheduled to approve data inputs to the CAA computer modeling and review the modeling outputs. SAGs are convened to approve the specific inputs to the CAA models. The final SAG is scheduled to review the warfighting force structure requirements developed through the CAA computer modeling. The format and content of the SAGs is subject to change. However, the forums should approve the related items in these general categories:

**1** Deployment models. Inputs include the general parameters, modeling for all U.S., allied, and threat forces, and deployment assumptions; all weapons, characteristics, rates of fire, munitions available, and lethality. This category focuses on how we model and how we constrain the force.

**2** Combat modeling. Inputs include the combat modeling, approving the priority of flow, requirements versus capabilities, and the campaign plan (warfight and support concept). This category focuses on how we deploy and how we fight the force.

**3** Force Analysis Simulation of Theater Administrative and Logistics Support (FASTALS). Inputs considered for approvals are fuel, ammunition, host nation support (HNS), coalition support, stockage levels, the casualty rates, evacuation policy and the allocation rules. This category focuses on how we support and sustain the force. This forum terminates the guidance determination when all assumptions, planning factors and guidance inputs are approved for the current TAA cycle.

**4** Modeling outputs. Review and approval is gained through the final SAG. This SAG reviews the warfighting force structure requirements developed through CAA modeling. It focuses on reviewing and approving the “required force” file prior to the VCSA reviewing and approving the “required” force.

**(3) Setting the stage for quantitative analysis.** During the early stages of Phase I, CAA makes several model runs of Global Deployment Analysis System (GDAS) and Concepts Evaluation Model (CEM) to set the stage for the second part of Phase I, Quantitative Analysis.

**b. Quantitative analysis.** CAA takes the operating forces identified in the NMS for employment in the DPG scenarios and determines the generating force structure. Through

computer modeling, CAA develops the EAD/EAC, CBT/CS/CSS forces required to support the deployed division and non-division force, given the assumptions and guidance approved by the SAGs. CAA also develops the TDA force structure required to support the operating and generating force structure. CAA accomplishes the modeling of TAA through a series of analytical efforts and associated computer simulations.

**(1) CAA modeling.**

**(a) GDAS.** A strategic deployment analysis, GDAS, is accomplished for each scenario. The CAA models have as their major inputs the available strategic mobility (lift) forces, the joint force(s) requiring movement, the required mobilization and training times for RC forces, and the DPG's specified desired delivery schedule for the operating force. The major output is the achievable mobilization station - to -port of embarkation-to-port of debarkation to tactical assembly area arrival schedule for all units (CBT/CS/CSS). This becomes one input into the theater combat operations analysis, CEM.

**(b) CEM.** A theater combat operations analysis is accomplished at both tactical and operational levels for each scenario, using the additional major inputs of friendly and enemy weapons' quantities and effectiveness data, friendly and enemy tactical and operational doctrines, projected resupply capabilities, and available joint and combined forces. Major outputs which become inputs to the theater logistical analyses, FASTALS, include forward line of own troops (FLOT) movement over time, personnel and equipment casualties to the operating force, ammunition expenditures, and brigade/division combat intensities.

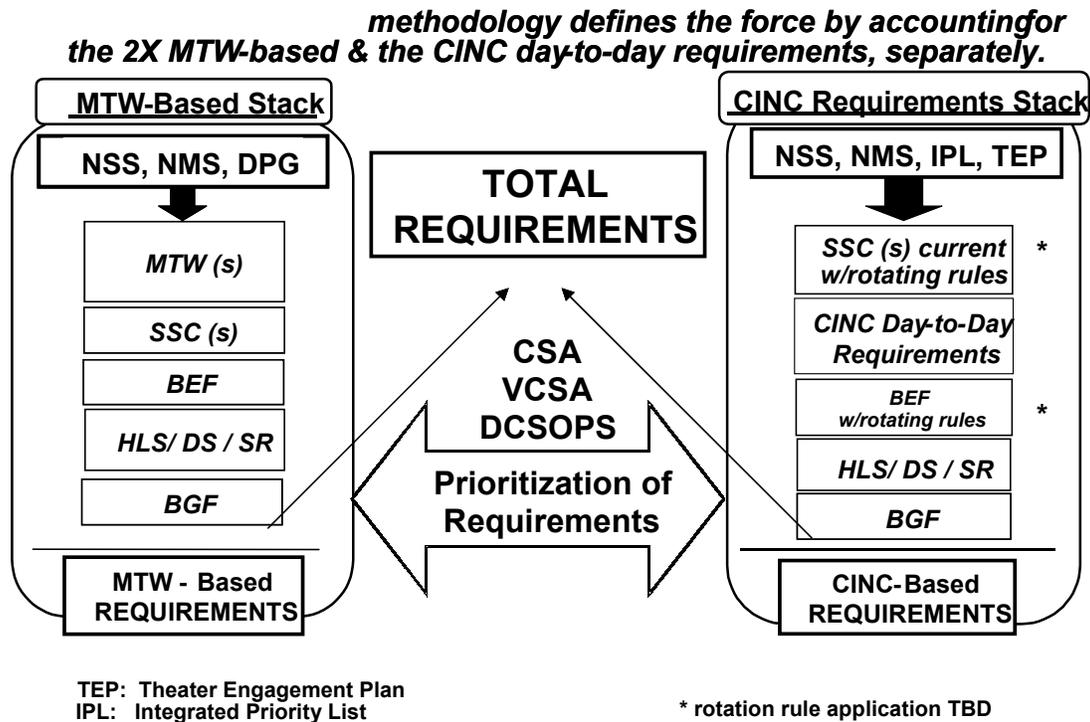
**(c) FASTALS.** A theater logistical analysis for each scenario utilizes the outputs of CEM as inputs, along with such logistical data as in-place stocks, existing infrastructure and transportation network, available host-nation support, projected consumption rates, unit direct support (DS) and general support (GS) maintenance requirement factors, and supply, medical, and construction policies to determine time-phased personnel, replacement, medical, material, maintenance, construction, and transportation workloads. In combination with the allocation rules approved by the SAGs, these workloads generate the CS/CSS support force requirements and a time-phased required troop deployment list for that scenario.

**(2) Total requirements.** The total force requirements include the force requirements identified to successfully conduct the MTW(s) (MTOE – CBT/CS/CSS), SSCs, all forces developed for the Base Engagement Force (BEF) (MTOE and TDA) and Base Generating Force (BGF) (MTOE and TDA), and designated Strategic Reserve/Homeland Defense/Domestic Support (MTOE), as well as CINC day-to-day force requirements (Figure 5-9).

**(a)** The total MTOE requirements file include units required/generated in the MTW(s) warfight(s), units required in the multiple SSC MTOFs, the BGF, Strategic Reserve, and BEF.

**(b)** The MTW(s) produce a "time-phased" force that includes the "operating" forces and the "doctrinal" non-divisional support force requirements (fully structured and totally optimized) that sustain the combat forces based on the DPG/IPS, doctrine, allocation rules and the conduct of the warfight. Unit requirements for SSCs, BEF, BGF, Homeland

Defense, Consequence Management and Domestic Support Operations are additive to the MTW(s) force requirements.



**Figure 5-9. Sizing and Shaping Methodology**

(c) TDA requirements include force structure needed to support the MTW(s), support multiple SSCs, organizations found in the BGF, organizations supporting the warfight, organizations supporting the BEF, and organizations supporting a variety of domestic support missions.

**c. Review and approval.** Phase I (Requirements Determination) is complete after the SAG COC and GOSAG review the CAA computer generated output (total warfighting MTOE and TDA requirements).

(1) The total warfighting requirements, portrayed by FASTALS as a fully structured and resourced force at authorized level of organization (ALO) 1, are reviewed and approved by the COC and GOSAG.

(2) Additionally, the SAG COC and GOSAG review and approve the force structure requirements supporting the BEF, BFG, Homeland Security, Consequence Management, and Domestic Support Operations. The GOSAG recommends approval of the force to the VCSA.

(3) The VCSA reviews and approves the "total force requirements" generated through the computer models and recognized within the BEF, and BGF accounts. The VCSA review and approval is the transition to Phase II of TAA (Resource Determination).

(4) After the VCSA reviews and approves the total force requirements, a comparison of data files (MATCH report) is made between the VCSA approved total force requirements (CAA developed) and the current program force (Master force (MFORCE)).

(a) The MATCH (not an acronym) report provides the delta between the new requirements and the programmed force. The MATCH is accomplished through a computer comparison program. CAA produces the required MTOE/TDA force file by combining the troop lists of required forces for the various scenarios (stacked simultaneity), in accordance with guidance provided from ODCSOPS, produces the “required MTOE/TDA force” file. The “required MTOE/TDA force” file has five major components:

- CBT, CS, and CSS units directed, generated and verified to successfully win the MTW(s).
- Operating and generating forces developed to support the “worse case” simultaneous stacking of SSCs (based on the likelihood and impact on the U.S.).
- Units (CBT/CS/CSS) required for the BEF.
- Units (CBT/CS/CSS) required for the BGF.
- Strategic Reserve. Includes the strategic reserve forces, Domestic Operations Support forces, Consequence Management (Homeland Security) forces and OCONUS CINC requirements.

(b) A computer program compares the VCSA approved, doctrinally required, force file provided from CAA with a current list of on-hand and programmed units (MFORCE from SAMAS) to determine the “delta” (component (COMPO) 5) for future programming discussions and issue formulation. The MATCH report and required force files are provided to ODCSOPS for dissemination to the MACOMs for review and issue formulation in preparation for the Resource Determination phase.

### 5-23. Phase II. Resource Determination

Resource determination consists of two separate activities: qualitative analysis and leadership review. The qualitative analysis is the most emotional facet of the TAA process because the results impact every aspect of the Army. Therefore, this phase requires extensive preparation by participants to ensure the best warfighting force structure is developed.

**a. Qualitative analysis.** Qualitative analysis is conducted to develop the initial POM force, within end strength guidance, for use in the development of the POM. A series of resourcing forums, analyses, panel reviews, and conferences consider and validate the FASTALS model generated requirements and the analysis of those requirements. The qualitative analysis is conducted during the resourcing conference. The resourcing conference is held in two separate sessions: COC and GOSC.

(1) *Resourcing conference COC.*

(a) The resourcing conference COC provides the initial qualitative analysis and review of the CAA developed force. The resourcing conference COC provides the opportunity for the ARSTAF, MACOMs, proponent representatives and staff support agencies to provide input, propose changes, and surface issues. The issues focus on COMPO and ALO, and center on defending claimant versus billpayer resourcing issues, while voicing

concerns about priorities versus risks. It allows CINC representatives (Army component commanders) to verify that theater specific requirements are satisfied by Army force structure assigned/appORTioned to their commands to meet current CINC operation plan (OPLAN)/concept plan (CONPLAN) warfighting requirements and CINC day-to-day requirements.

**(b)** The resourcing conference is conducted over a 3-5 day period for the MTOE force structure and 3-5 day period for the TDA force structure. The focus is to identify and develop potential solutions for the myriad of issues brought to TAA. The OIs and force integrators (FIs) are key individuals in this forum. The OIs and FIs have the responsibility to pull together the sometimes diverse guidance and opinions developed during the conference, add insight from a branch perspective, and establish whether the changes in the building blocks for the design case were in fact the best course of action. The OIs pull all the relevant information together for presentation to the COC over a 2-day period. During these presentations, the OI reviews each standard requirements code (SRC) that falls under his/her area of responsibility, and presents recommendations on how to solve the various issues.

**(c)** HQDA action officers and their counterparts enter an intense round of preparations for the upcoming resourcing conference. Since the quantitative analysis only determined requirements for doctrinally correct, fully resourced (ALO 1) CBT/CS/CSS units deployed into the theater(s) of operations, the determination of a need for additional nondeploying units, the acceptance of risk through the reduction in ALO of units, and the allocation of resourced units to components (Active Army, U.S. Army Reserve (USAR), ARNG) must all be accomplished during the resourcing conferences. HQDA bases force structuring options on an understanding of the objectives to be achieved, the threat and the constraints. The primary differences among various options are the extent to which risk, constraints and time are forecast.

**(d)** The resourcing conference COC integrates TDA issues and requirements, and reviews and resolves issues based upon sound military judgment and experience. COC submits their product to the FFR process for review by the ARSTAF. The COC forwards their recommendations and unresolved issues, after the FFR process is completed, to the resourcing conference GOSC.

**(2)** *FFR.* The ARSTAF conducts a FFR during the resource determination phase. The ARSTAF further analyzes the force, initially approved by the COC, via the FFR. The FFR process uses the results of the TAA resourcing conference as input, conducting a review and adjusting the POM force to assure it is affordable and supportable. At the macro level, within the limits of personnel and budgetary constraints, the FFR determines if the POM force can be manned, trained, equipped, sustained and stationed. The FFR process identifies problems with the POM force and provides alternatives, based on prior TAA initiatives, unalterable decisions from the Army leadership, or PBDs, to the GOSC for determining the most capable force within constraints.

**(3)** *Resourcing conference GOSC.* The qualitative phase culminates with the resourcing conference GOSC. The GOSC reviews/approves the decisions of the resourcing conference COC, reviews the output from the FFR process and addresses remaining unresolved issues. The resourcing conference GOSC approves the force that is ultimately forwarded for CSA decision and Secretary of the Army approval.

**b. Leadership review.** After the resourcing conference GOSC meets to resolve any contentious or outstanding issues, the leadership review is initiated through the force program review (FPR) process. The VCSA chairs the FPR resolving any issues forwarded from the resourcing conference forums. The VCSA scrutinizes, reviews and approves the force ultimately presented to the CSA for decision and briefed to the Secretary of the Army.

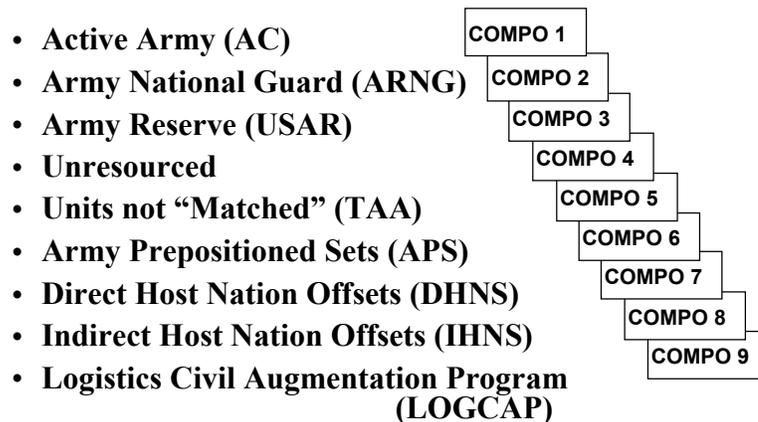
#### **5-24. Army structure (ARSTRUC) message**

The ARSTRUC message provides a historical record of decisions made during the TAA process. The ARSTRUC message, produced by ODCSOPS, is directive in nature providing the MACOMs results at the SRC level of detail. The ARSTRUC message directs the MACOMs to make appropriate adjustments to their force structure at the unit identification code (UIC) level of detail during the next command plan. Command plan changes are recorded in the SAMAS, the official database of record for the Army. SAMAS, along with the BOIP and TOE, provides the basis for Army authorization documentations (MTOE and TDA).

#### **5-25. The product of TAA**

**a.** The resourced TAA force represents the force structure for POM development, capturing all components (Active, Reserve, host nation) and TDA requirements through the end of the POM years (MFORCE). The POM force meets the projected mission requirements within anticipated end strength and equipment level. The final output should result in an executable POM Force. The Army forwards the POM force to OSD with a recommendation for approval.

**b.** The product of the TAA and POM processes is the approved force structure for the Army, which has been divided for resource management purposes into components: the Active Army (COMPO 1), the ARNG (COMPO 2), the USAR (COMPO 3), and unresourced units (COMPO 4). COMPO 4 units, mostly CSS units, are part of the Army's required force structure, but are deliberately unresourced so that available resources can be applied to higher priority peacetime force structure initiatives and other Army programs. Three other components — direct host-nation support (COMPO 7), indirect host-nation support (COMPO 8), and logistics civil augmentation (COMPO 9) — comprise force structure offsets. COMPO 7 and 8 are guaranteed by host-nation support agreements. COMPO 9 is an augmentation, not an offset and represents the contracts for additional support and services to be provided by domestic and foreign firms augmenting existing force structure (Figure 5-10).



**Figure 5-10. Force Structure Components (COMPO)**

## SECTION VI

### PHASE V—DOCUMENT ORGANIZATIONAL AUTHORIZATIONS

#### 5-26. Documentation components

**a.** The fifth and final phase of force development, the documenting of unit authorizations, can be viewed conceptually as the integration of developing organizational models and determining organizational authorizations. Developing organizational models is driven by battlefield requirements for specific military capabilities that will defeat a postulated threat. The results of this process are TOEs for organizations staffed and equipped to provide increments of the required capabilities. TOEs specify Army requirements. Determining organizational authorizations, on the other hand, is a force structure process that documents resources (people, equipment, dollars and facilities) for each unit in the Army.

**b.** Because the Army is a complex array of people, each with one of a multitude of different skills, and many millions of items of equipment, there must be an organized system for documenting what is required and how much is authorized. More importantly, as the Army moves forward with its equipment modernization program, and new doctrines and organizations evolve, the Army must have a way of keeping track of changes that are made so that they may be managed efficiently and with a minimum of turbulence. The Army’s authorization documentation system meets these needs.

**c.** Each unit in the Army has its mission, structure, personnel and equipment requirements, and authorizations established in an authorization document. These documents are essential at each level of command for the Army to function. A unit uses its authorization document as authority to requisition personnel and equipment and as a basis for readiness evaluation. Authorization documents are used to manage personnel and materiel procurement, force planning, programming, budgeting, training, and distributing. Additionally, authorization documents are used at various levels of command for inspections, surveys, special projects, and studies.

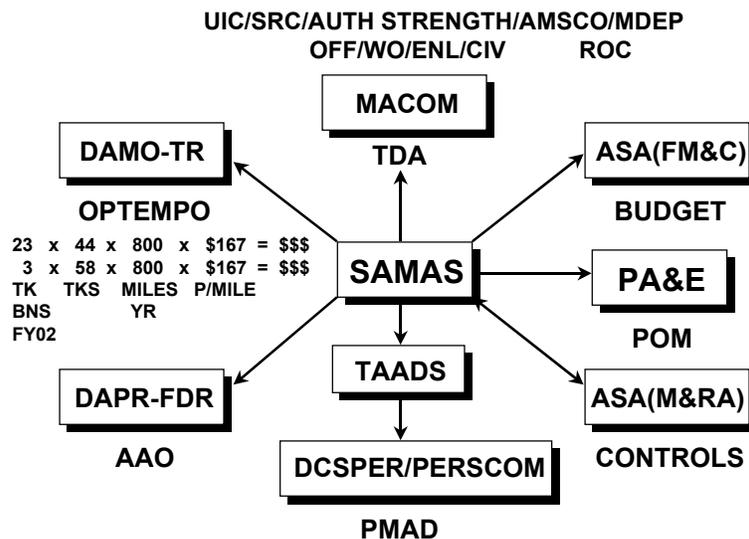
**5-27. Structure and Manpower Allocation System (SAMAS)**

a. The SAMAS is the force development automated data processing (ADP) system that records, maintains and distributes force structure information for all 8500+ units in the Total Army. SAMAS is the Army’s “database of record” for all force structure actions. It maintains information for all Active Army (COMPO 1), ARNG (COMPO 2), USAR (COMPO 3), required (but unresourced) units (COMPO 4), Army prepositioned stocks equipment sets (APSES) (COMPO 6) and direct host nation support (COMPO 7) units.

b. The primary inputs to SAMAS are the “operating” forces (divisions, separate brigades, armored cavalry regiments and special forces groups) directed by the DPG and “generating” forces at EAD/EAC (CBT/CS/CSS and TDA) derived from the TAA process.

c. SAMAS has two primary files. One is a Force Structure (FS) File (commonly referred to as the “Force File”), that reflects the approved (documented and programmed) force structure position for each unit in the Army. The Force File produces the Army’s MFORCE. The second file is the Program and Budget Guidance (PBG) File (commonly referred to as the “Budget File”). The Budget File produces both the civilian annex to the MFORCE as well as the Manpower Addendum to the PBG.

d. Figure 5-11 depicts SAMAS data elements, controls, distribution and use of information contained within the database.



**Figure 5-11. SAMAS**

**5-28. The Force File**

a. The Force File is updated and maintained by the FIs, command managers and OIs at HQDA ODCSOPS-FM. The Budget File is updated and maintained by the resource integrators/PBG command managers of USAFMSA. The Force File displays the force structure position for every unit in the Army at UIC, SRC, effective date (EDATE), Army management structure code (AMSCO), MDEP, resource operating command (ROC), required and authorized strength levels (personnel spaces), MTOE and TDA number level of detail. Additional data items include troop program sequence number (TPSN), unit number

and regimental designation, unit description, command assignment code, location code, station name, phase and action codes, required and authorized strength levels, mobilization data, Army force package code (FPC) and Department of the Army Master Priority List (DAMPL) number. A sample force file record is displayed in Figure 5-12. There are approximately 40 total data items for each unit, displayed over-time (previous, current and future programmed and approved actions). SAMAS does not contain MOS and grade level of detail, but drives the development of authorization documents in TAADS, which contains the MTOEs and TDAs at paragraph, line, MOS and grade, line item number (LIN), equipment readiness code (ERC) and quantity level of detail.

UIC	COMPO	TPSN	ES	UNMBR	CARS	BR	ULC	UNTDS	EDATE			
WAGRAA	1	00001	16	0008	02	AR	BN	TANK(M1A2)	011016			
ACTCO	PHASE	SRC		NTREF	STNNM	LOC	ASGMT	PRUIC				
X	D	17375F000100		**	FT HOOD	5TX	FC	*****				
STRUCTURED STRENGTH					CCNUM	ADCCO	AMSCO	AUTHORIZED STRENGTH				
OFF	WO	ENL	AGG	CIV				OFF	WO	ENL	AGG	CIV
35	0	312	347	0	FC0102	*****	11101100000	33	0	312	345	0
ROC	DC	ROBCO	UNPID	DAMPL	MDEP	AUTHORITY						
761	DC	****	*****	*****	W51C	TAA05						

**Figure 5-12. Sample Force File Record**

**b.** A sample SAMAS extract report for the 82d Airborne Division Artillery (DIVARTY) is displayed in Figure 5-13. It shows the four units of the DIVARTY (headquarters and headquarters battery (HHB) and three direct support field artillery (DSFA) battalions) and the approved force structure in the June 00 MFORCE. Data elements include UICs, SRCs (TOE and ALO), authorization document numbers, EDATES and required and authorized strength levels. In approximately two dozen lines, the “force programming” of the 82d Airborne DIVARTY is depicted.

TPSN	UIC	CR	UNMB	BR	ULC	UNTDS	SRC	DOCNO	CCNUM	EDATE	P	A	STOF	STWC	STEN	LAUOF	AUWCA	UENL
01082	WABDAA	70	0082	FA	HHB	DIVARTY ABN	06202L00010006202LFC82	FC1099	19981016	D	X	23	4	84	23	4	84	
01082	WABDAA	70	0082	FA	HHB	DIVARTY ABN	06202L00010006202LFC82	FC1000	19991016	D	U	23	4	84	23	4	84	
01082	WABDAA	70	0082	FA	HHB	DIVARTY ABN	06202L00010006202LFC82	FC0101	20001016	D	R	23	4	85	23	4	85	
01082	WABDAA	70	0082	FA	HHB	DIVARTY ABN	06202L00010006202LFC82	FC0102	20011016	D	R	23	4	86	23	4	86	
01082	WABDAA	70	0082	FA	HHB	DIVARTY ABN	06202L000100		20050921	A	X	23	4	85	23	4	85	
01082	WABDAA	70	0082	FA	HHB	DIVARTY ABN	06202L000100		20070921	A	X	23	4	85	23	4	85	
01082	WABJAA	01	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC1099	19981016	D	R	37	3	401	37	3	401	
01082	WABJAA	01	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC2099	19981017	D	X	37	3	401	37	3	401	
01082	WABJAA	01	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC1000	19991016	D	U	37	3	401	37	3	401	
01082	WABJAA	01	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC0101	20001016	D	R	37	3	398	37	3	398	
01082	WABJAA	01	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC0102	20011016	D	R	37	3	398	37	3	398	
01082	WABJAA	01	0319	FA	BN	105T ABN	06205L000100		20050921	A	X	37	3	398	37	3	398	
01082	WABJAA	01	0319	FA	BN	105T ABN	06205L000100		20070921	A	X	37	3	398	37	3	398	
01082	WABKAA	02	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC1099	19981016	D	R	37	3	401	37	3	401	
01082	WABKAA	02	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC2099	19981017	D	X	37	3	401	37	3	401	
01082	WABKAA	02	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC1000	19991016	D	U	37	3	401	37	3	401	
01082	WABKAA	02	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC0101	20001016	D	R	37	3	398	37	3	398	
01082	WABKAA	02	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC0102	20011016	D	R	37	3	398	37	3	398	
01082	WABKAA	02	0319	FA	BN	105T ABN	06205L000100		20050921	A	X	37	3	398	37	3	398	
01082	WABKAA	02	0319	FA	BN	105T ABN	06205L000100		20070921	A	X	37	3	398	37	3	398	
01082	WABLAA	03	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC1099	19981016	D	R	37	3	401	37	3	401	
01082	WABLAA	03	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC2099	19981017	D	X	37	3	401	37	3	401	
01082	WABLAA	03	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC1000	19991016	D	U	37	3	401	37	3	401	
01082	WABLAA	03	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC0101	20001016	D	R	37	3	398	37	3	398	
01082	WABLAA	03	0319	FA	BN	105T ABN	06205L00010006205LFC82	FC0102	20011016	D	R	37	3	398	37	3	398	
01082	WABLAA	03	0319	FA	BN	105T ABN	06205L000100		20050921	A	X	37	3	398	37	3	398	
01082	WABLAA	03	0319	FA	BN	105T ABN	06205L000100		20070921	A	X	37	3	398	37	3	398	

Figure 5-13. Extract Report 82 ABN Division DIVARTY

**5-29. The Budget File**

The Budget File contains Active Army military and civilian manpower data. The Budget File represents manpower for which budget authority is available. The Budget File is the feeder system to the HQDA Program Analysis and Evaluation (PA&E) Program Optimization and Budget Evaluation (PROBE) database, which captures the Army’s POM and Budget submissions. The Budget File also feeds civilian data to the Assistant Secretary of the Army (Financial Management and Comptroller) (ASA(FM&C)) Civilian Manpower Integrated Costing System (CMICS) where civilian costing is performed for all PPBES events. Primary inputs to the Budget File are: MACOM command plans, PBDs and POM decisions. Primary outputs of the Budget File are the manpower addendum to the PBG and the civilian annex to the MFORCE. The addendum is normally published three times a year.

**5-30. Force documentation**

- a. TAADS applies to entire Army—Active Army, ARNG, USAR, and civilian work force. The Army uses the system to record changes in requirements and authorizations that result from changes in unit missions, organizational structure, and equipment.
- b. TAADS documents requirements and authorizations for MTOE units at various levels of the organization using data from SAMAS, the TOE, BOIPs, and ICPs. Requirements and authorizations for TDA units and are derived from SAMAS, concept plans, manpower surveys/studies, and manpower standards applications.

c. Detailed integration and documentation of the force centers on the “command plan process,” a yearlong process running from the approved June MFORCE until the next June’s approved MFORCE. The Army uses this process to update and create MTOE and TDA documents. These documents officially record decisions on missions, organizational structure, and requirements and authorizations for personnel and equipment (Figure 5-14).

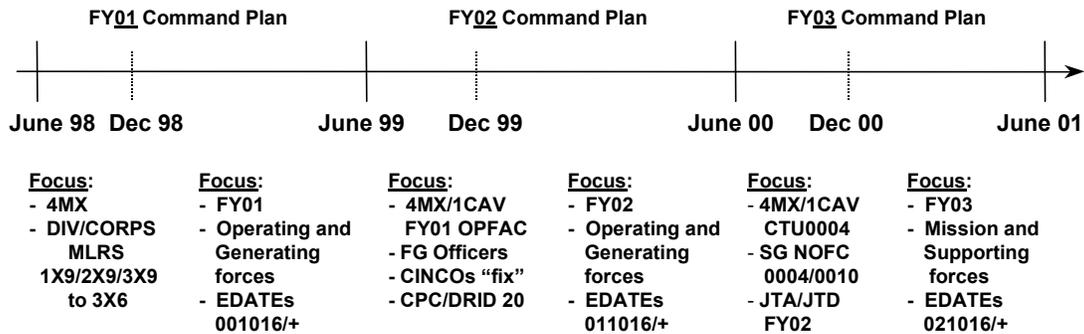


Figure 5-14. The Command Plan Process

d. The force structure authorization documentation process (Figure 5-15) begins with documentation guidance released by HQDA ODCSOPS-FM at the start of the documentation window. The HQDA guidance establishes the focus (“target”) of the documentation window and directs documentation of specific units and actions. Under centralized documentation (CENDOC), USAFMSA-ADD builds draft MTOEs based on the documentation guidance and forwards them to HQDA and the MACOMs for subject matter expert (SME), usually the OI for that type of unit, and unit review. Draft TDA documents are also built by USAFMSA-ADD.

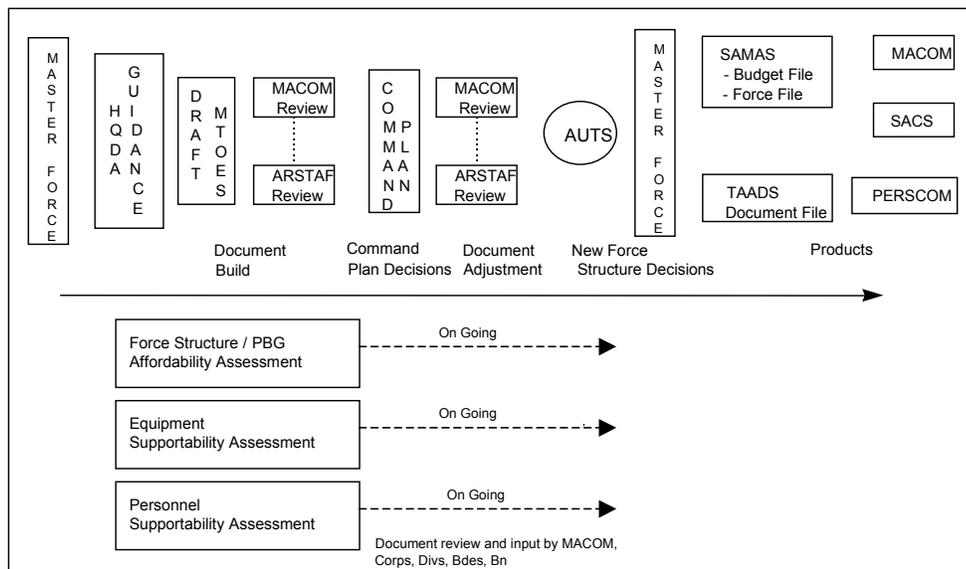
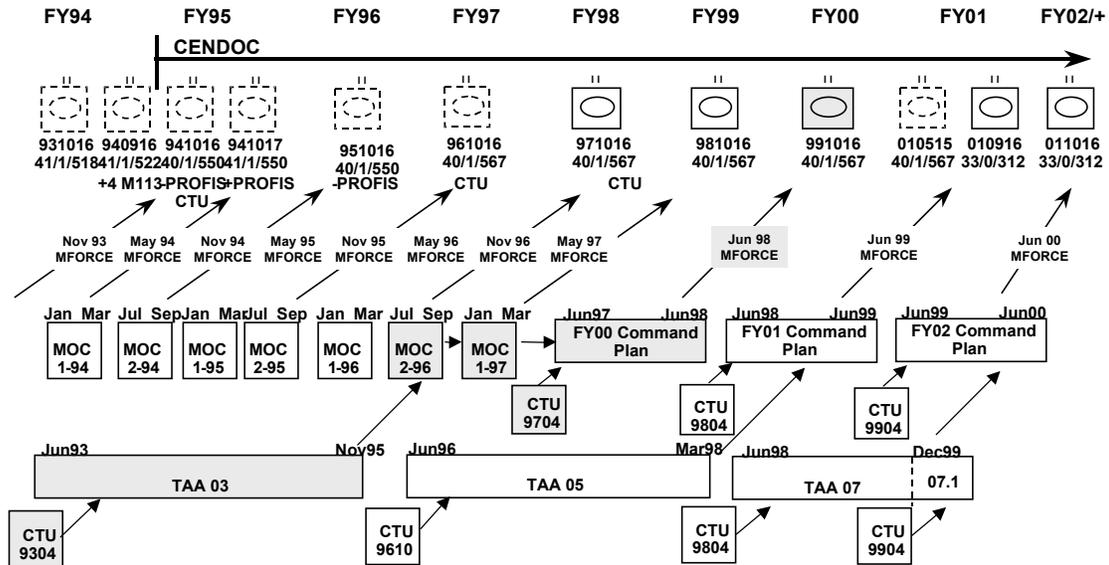


Figure 5-15. MTOE Documentation Process

e. The command plan is used to make adjustments between SAMAS programmed spaces and the proposed draft authorization documents. In some cases, two to four years

separate the TAA force programming for a unit and the documentation of the unit (Figure 5-16). Changes in structure over time necessitate that “bills” and “billpayers” for authorized spaces be identified and adjustments made to balance the Force and Budget Files in SAMAS with TAADS. Those issues without resolution are deferred pending identification of other solutions (directed military overstrength (DMO), overstructure/undermanning (OS/UM), re-order documentation priorities, as examples).



**Figure 5-16. The Year-to-Year Flow**

f. Command plan is also used by the MACOMs to comply with TAA directed force structure actions and to submit selected MACOM initiatives. HQ, U.S. Army Reserve Command (USARC) submits a command plan for all USAR units in the continental United States (CONUS) (less USAR Special Operations Forces) through HQ, U.S. Army Forces Command (FORSCOM). Force structure issues for USAR units outside of the continental United States (OCONUS) are submitted through the respective MACOM. The National Guard Bureau (NGB), in coordination with the State NG HQ, develops the Army National Guard Troop Structure Program (ARNG-TSP). After acceptance by the States, the ARNG-TSP is submitted to HQDA as the ARNG command plan.

g. Following command plan, SAMAS is adjusted to the “corrected” strength levels and the draft MTOEs, with changes applied, are again forwarded to the SMEs and the MACOMs for review to insure the agreed upon positions have been documented.

h. At the close of each documentation window, the Automatic Update Transaction System (AUTS) is run. AUTS compares SAMAS programming against TAADS documents submitted for approval. Those TAADS documents that match SAMAS programming at UIC, SRC, EDATE, strength level, and officer (OFF)/warrant officer (WO)/enlisted (ENL)/civilian (CIV) level of detail are approved and make up the new MFORCE. Approved documents are forwarded to the MACOMs for distribution to the appropriate units. “Disconnected” SAMAS/ TAADS actions are not approved or included in the updated

MFORCE. Approved post-AUTS TAADS documents provide the basis for updating the ODCSPER/ U.S. Total Army Personnel Command (PERSCOM) Personnel Management Authorization Document (PMAD) and are a primary input to the Structure and Composition System (SACS). Additionally, the MFORCE is sent to, and provides the baseline for, HQDA ODCSOPS-Training (DAMO-TR) in the Battalion Level Training Model (BLTM) and the Training Resource Model (TRM) for developing operating tempo (OPTEMPO) funding, Assistant Secretary of the Army (Financial Management and Comptroller) (ASA(FM&C)) Army Budget Office (ABO) for civilian costing through the CMICS model and budget estimate submission (BES) preparation, and HQDA PA&E for POM preparation. The Assistant Secretary of the Army (Manpower and Reserve Affairs) (ASA(M&RA)) provides input “controls” for total strength, by category, to be allocated in SAMAS.

**i.** Concept plans are used to address force structure actions not approved or programmed in the current MFORCE. Concept plans complement the command plan process by providing an avenue to address exceptional near-term force structure actions. These actions could include unprogrammed activations, inactivations, changes in strength or ALO, deviation from MTOE standardization, and changes in Army Management Headquarters Activities (AMHA) accounts, as examples. The concept plan must be submitted to HQDA in accordance with AR 71-32 and will state, among other things, the purpose, objectives, advantages, and disadvantages of the proposed action and will include the resource requirements (force structure and budget “bills” and “billpayers”) and draft authorization documentation.

**j.** The SACS, in conjunction with the Force Builder, produces the Army’s time-phased demands for personnel and equipment over the current, budget and program years and is extended for a total of a ten-year period. Additionally, SACS defaults to FY 2050 and builds a fully modernized OTOE position for all units. In this way, SACS shows current levels of modernization, levels achieved at the end of the POM, and a fully modernized Army (for planning purposes). SACS outputs combine information from BOIP, TOE, SAMAS, TAADS and known force structure constraints not included in the previous files. Key outputs are the Personnel Structure and Composition System (PERSACS) and the Logistics Structure and Composition System (LOGSACS). Both PERSACS and LOGSACS are at the UIC/ EDATE and MOS/grade (GRD)/LIN/ERC/quantity (QTY) level of detail for requirements and authorization for MTOE and TDA units.

**k.** Total Army Equipment Distribution Program (TAEDP), for example, uses equipment requirements and authorizations from LOGSACS to plan equipment distribution. The PMAD, used by ODCSPER and PERSCOM for personnel requirements and authorizations, is updated in part by TAADS, not PERSACS. It is hoped that with further improvements in SACS, greater utility will be found for PERSACS, allowing it to eventually replace PMAD.

### **5-31. Authorization documents**

There are four basic authorization documents in the Army: MTOE, TDA, mobilization TDA (MOBTDA), and augmentation TDA (AUGTDA).

**a. MTOE.** The MTOE is a modified version of a TOE that prescribes the unit organization, personnel, and equipment necessary to perform a mission in a specific geographical or operational environment. It reflects the organizational option selected from

the TOE. Thus, the MTOE of a unit organized at the ALO 3 has been based on the Level 3 organizational structure found in the TOE. At unit level, the MTOE is the base document for:

- Requesting personnel and equipment.
- Distributing personnel and equipment resources.
- Unit status reporting.
- Reporting supply and maintenance status.

**b. TDA.** The TDA prescribes the organizational structure for a unit having a support mission for which a TOE does not exist and which may include civilian positions. TDAs are unique in that they are developed based on the type and level of workloads associated with the unit's mission. Units with similar missions, like U.S. Army garrisons, may be organized similarly but may have a substantially different mix and number of personnel and equipment authorizations due to differences in the population and composition of the post they support. At unit level, a TDA is used for the same purposes as an MTOE except for unit status reporting, which is generally not required of TDA units. At MACOM and HQDA level, the MTOE and TDA are used to provide equipment and personnel MOS and grade details for planning, programming, budgeting, and force structuring activities.

**c. MOBTDA.** The MOBTDA records the mission, organizational structure, and personnel and equipment requirements and authorizations for an Army unit to perform its assigned mission upon mobilization. It reflects the unit's mobilization plan by identifying functions to be increased, decreased, established, and discontinued.

**d. AUGTDA.** The AUGTDA records the mission, organizational structure, and personnel and equipment requirements and authorizations to augment an MTOE unit to perform added non-TOE peacetime missions. AUGTDA can include civilian personnel and/or commercial equipment allowances required and authorized to an MTOE unit. An example is the augmentation of the 11th Armored Cavalry Regiment (ACR) at the National Training Center (NTC), Fort Irwin, CA, with equipment authorizations for their "visually modified" (VISMOD) opposing forces (OPFOR) equipment.

### **5-32. The Army Authorization Documents System (TAADS)**

**a.** Every Army unit (Active Army, ARNG, and USAR) and Army components of other agencies must have an authorization document to reflect a supportable organizational structure. Authorization documents state a unit's approved structure and resources and serve as a basis and authority for requisitioning.

**b.** The development and documentation of authorization documents is supported by TAADS. TAADS is a HQDA automated system that contains all unit authorization documents; maintains quantitative and qualitative personnel and equipment data for individual units and the entire Army force structure; standardizes authorization documents for similar parent units; and interfaces with other DA automated systems, such as SAMAS.

**c.** The authorization document data maintained in TAADS are organizational structure, personnel, and equipment requirements and authorizations. The basic procedures for documentation are the same for MTOE and TDA units; that is, all unit personnel and

equipment requirements and authorizations are written in the same detail. However, the basis for developing the two documents differs.

**d.** MTOEs are derived by adjusting/ modifying TOEs, when required, to meet specific operational requirements. A unit will be organized under the proper level of its TOE to the greatest extent consistent with the mission and the availability of manpower spaces as directed by the DPG for “operating” forces (ALO 1 for divisions, separate brigades, ACRs and special forces groups) and TAA allocations to “generating” forces (EAD/EAC CBT, CS, CSS and TDA). Equipment modernization is fielded in accordance with HQDA systems distribution plans and the TAEDP.

**e.** TDAs are uniquely developed for units with specific support missions. The organizational structure of TDA units will be developed to attain only essential manning, the most efficient use of personnel, and the most effective operational capability within the manpower spaces prescribed in the command force structure. Manpower standard applications, manpower surveys, and manpower requirements change requests, and personnel requirements from BOIPs will be used to structure TDA manpower. When manpower authorizations are insufficient to satisfy valid requirements, garrison/post and/or unit commanders will distribute resources on a mission-priority basis. Unsupported requirements are sometimes filled by a variety of means, e.g. borrowed military manpower, overhires, or the restructuring/redefining of work responsibilities. Equipment utilization and BOIP data will be used to develop TDA materiel requirements.

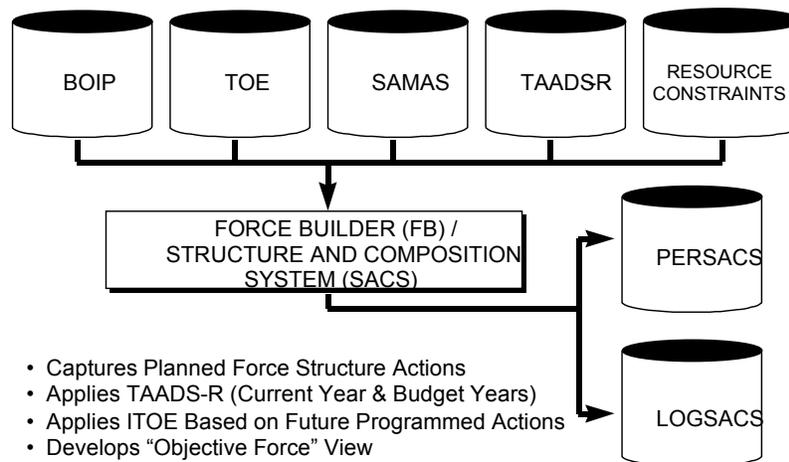
**f.** HQDA reviews and approves all authorization documents (MTOEs and TDAs) using the AUTS process to ensure compatibility among the unit’s mission, capabilities, organization, ALO, and the allocation of resources. Approved MTOEs and TDAs are documented in TAADS and the SAMAS MFORCE.

### **5-33. Structure and Composition System (SACS)**

**a.** The SACS process is supported by the Force Builder Decision Support System (FBDSS). Operated and maintained by USAFMSA, FBDSS combines data from a multitude of management information systems and databases addressing force structure, personnel, manpower, and dollar resource constraints.

**b.** FBDSS produces the SACS output that provides time-phased personnel and equipment requirements and authorization needed for a specified force structure for a 10-year period (current, budget and POM years, extended).

**c.** USAFMSA produces SACS output three to four times per year. These outputs are used to analyze force structure decision impacts on out-year programming in terms of Army forces (COMPOs, unit types, and quantities) and unit composition (personnel and force modernization levels). Figure 5-17 shows SACS.



**Figure 5-17. FB/SACS Process**

**d.** Each SACS cycle begins with the analysis and synchronization of key force management information inputs—BOIP files, TOE files, SAMAS, and TAADS. These inputs provide insights into today’s and tomorrow’s structure, and the resources available for feasible modernization. Both the PERSACS and LOGSACS are based on these force structure decisions and resource constraints.

**(1)** PERSACS combines data from the HQDA SAMAS, TAADS, and TOE systems to state military personnel requirements and authorizations by grade, branch, and MOS/AOC) for each unit in the force for the 10 years of the SACS. This data supports planning for personnel recruiting, training, promoting, validating requisitions, and distribution.

**(2)** LOGSACS combines data from the HQDA SAMAS, TAADS, TOE, and BOIP to state equipment requirements and authorizations by LIN and ERC for each unit in the force for the current, budget, and POM years extended for a total of ten years. Authorized/required quantities of currently documented equipment are determined for each unit from its authorization document in TAADS for the first two years of the SACS run. Data for the POM period and beyond is derived from the unit TOE model and data on unit equipment for new developmental items that are undocumented, but planned for inclusion at a later date, are applied through application of the applicable BOIP/ICP file(s).

**e.** A summary of all unit requirements for a particular LIN, as computed by LOGSACS, is the initial issue quantity (IIQ) of that LIN. FBDSS takes the IIQ input and adds requirements for Army war reserves, operational projects, war reserve stocks for allies and operational readiness float (ORF)/ repair cycle float (RCF) to produce the Army Acquisition Objective (AAO).

**f.** SACS output products (PERSACS and LOGSACS) are published after the AUTS process at the end of the command plan cycle. The MFORCE reconciled at the end of AUTS is the key force structure input to initiate the SACS cycle.

---

**5-34. United States Army Force Management Support Agency (USAFMSA)**

**a.** USAFMSA (formerly the United States Army Force Integration Support Agency – USAFISA) is a FOA under HQDA ODCSOPS-FM. USAFMSA consists of ADD, RDD, and the USAFMSA’s Chief of Staff’s office.

**b.** USAFMSA’s organization and “customer” focus provides accurate and timely requirement and authorization databases for both personnel and equipment. The Chief of Staff’s office concentrates on force accounting, force planning, and programming. RDD (Forts Leavenworth and Lee) and ADD (Fort Belvoir) support all MACOMs with a full range of documents.

**5-35. Army Force Management School (AFMS)**

AFMS is part of the ODCSOPS and operates under the supervision of the Assistant Deputy Chief of Staff for Operations and Plans--Force Management. AFMS supports the force management and education processes through the conducting the following courses:

- Force Management Course.
- General Officer/Senior Executive Service (GO/SES) Force Integration Course.
- Action Officer Force Integration Course.
- Action Officer Logistics Course.
- Army Materiel Command (AMC) Action Officer Course.
- Deputy Chief of Staff for Personnel (DCSPER) Course.
- Army/Joint Staff Officer Orientation Course.
- Other courses tailored to the needs of specific target audiences are developed and conducted as required. AFMS also conducts specialized academic studies in the force management field.

**SECTION VII  
SUMMARY AND REFERENCES****5-36. Summary**

**a.** Army force development is accomplished through the integration of numerous processes. Requirements drive what the Army needs to give it the capability to deter or conduct operations across the spectrum in support of national security objectives. Resources determine the capabilities the Army can afford.

**b.** Force development begins with requirements for doctrine, training, leader development, organizations, materiel, and soldier systems derived from a concept of how-to-fight/operate (required capabilities). These requirements initiate the five force development phases: determining requirements, designing organizations, developing organizational models, determining organizational authorizations, and documenting those authorizations. The BOIP and TOE systems provide the organizational models that are the building blocks of force structure. The resource-driven force-structuring process determines the mix of units for a balanced force and how many units the Army can afford in our resource-constrained environment.

c. Finally, the authorization documentation process documents the decisions of the organizational unit modeling and force structuring activities and provides the detailed forecast of authorizations that forms the basis for acquiring, distributing, and sustaining personnel, materiel, and facilities in the Army.

d. The past several years have seen significant changes to the force development process, but the process of change and how to manage it remains dynamic. This chapter has been a snapshot of a process that needs to remain as dynamic as the environment it supports as we transform the Army.

### 5-37. References

- a. CJCS Instruction 3170.01A, *Requirements Generation Process*.
- b. Army Regulation 1-1, *Planning, Programming, Budgeting, and Execution System*.
- c. Army Regulation 71-9, *Materiel Requirements*.
- d. Army Regulation 71-11, *Total Army Analysis*.
- e. Army Regulation 71-32, *Force Development and Documentation - Consolidated Policies*.
- f. Message, HQDA, DAMO-ZA, 221230Z September 1995, Subject: *Revised MTOE Documentation Policy*.
- g. Field Manual 100-11, *Force Integration*.
- h. TRADOC Pamphlet 71-9: *Requirements Determination*.
- i. TRADOC Pamphlet 525-5, *Advanced Full Spectrum Operations (DRAFT)*.
- j. TRADOC Pamphlet 525-66, *Objective Force Capabilities (DRAFT)*.

