Chapter 13

Information Management

This chapter describes the Army Information Mission Area (IMA) principles and disciplines. Current programs and initiatives for modernization and sustainment of IMA within the installation infrastructure are presented for each IMA discipline.

CONTENTS

PRINCIPLES OF INFORMATION MANAGEMENT

Essential guiding principles that provide a basis for the information mission area as it develops for the year 2000 and beyond are contained in the Army Enterprise Strategy Vision document:

- Provide the Warfighter systems that meet validated needs.
- Provide the Warfighter C41 systems that interoperate in Joint and Combined operations.
- Provide the Warfighter assured access to mission-essential military and commercial space-based systems that support the Force Projection Army across the entire operational continuum.
- Provide the Warfighter an integrated digital information network that supports warfighting systems and assures C2 decision-cycle superiority.
- Provide the Warfighter a modern power projection platform to support peacetime operations, training, mobilization, force projection, split-base operations, and redeployment. See Figure 13-1.
- Provide the Warfighter more efficient information support for combat and peacetime operations.
- Provide the Warfighter the ability to access and exchange information at needed levels of classification using a single C41 system.
- Provide the Warfighter electromagnetic spectrum supremacy in order to maximize the benefits of maneuver and tempo in conjunction with firepower.
- Provide the Warfighter synchronized C41 capabilities that leverage commercial technology.
- Provide the Warfighter with cost effective training, testing, and rapid prototyping through state-of-the-art modeling and simulation.

INFORMATION MANAGEMENT STRUCTURE

IMA functions include all activities and resources employed in collecting, processing, managing, and providing data. IMA also focuses management's attention on specific commander's responsibilities and established procedures that feed the PPBES, and identifies people to accomplish the management tasks. The installation commander's role in IMA has changed dramatically in recent years. Formerly, IMA consisted of three distinct operational environments strategic, theater and tactical, and sustaining base. Changes in information systems technology have blurred these boundaries, and the goal of the Enterprise Strategy is to implement a seamless operational environment from the CONUS installation to the foxhole. Within this goal, the installation commander leads the power projection platform from which split-base

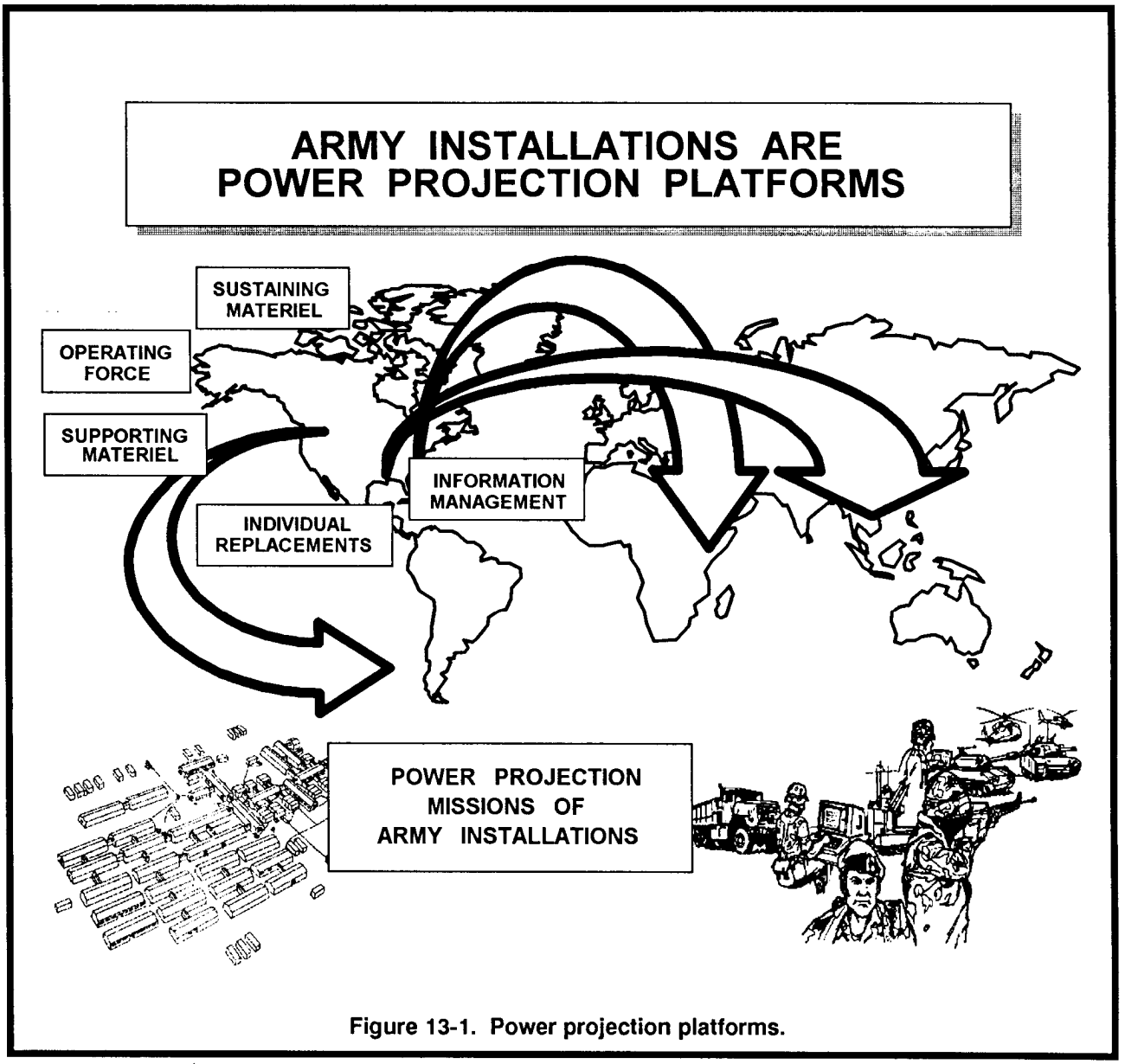

Figure 13-1. Power projection platforms.

operations are conducted through the use of the seamless information network.

The Army Information Resources Management Program (AIRMP)(AR 25-1) defines policies, responsibilities, and the process to identify information resources, validates information requirements, and establishes a systematic approach for satisfying those requirements. Information resources include data or information, information systems, associated equipment, support facilities, software, and personnel. The Army Information Architecture (AIA) defines relationships among Army elements in a hierarchy of documents. This set of documents starts with a capstone AIA developed by the Director of Information Systems for Command, Control, Communications, and Computers (DISC4). Subordinate organizations (Headquarters, DA staff proponents and MACOMS) add detail to the capstone AIA consistent with their missions. Developing the AIA is a top down process based on the guidance from DISC4 that specifies Armywide standards essential for data sharing and interoperability.

Key players in the Army information policy, direction, and guidance include DA, TRADOC, AMC, and US Army Information Systems Command (USAISC).

At DA, the DISC4 implements Army policy and reviews, validates, and approves the AIA. Headquarters, DA functional proponents, in coordination with DOD, develop standard systems for executing the Army's Title X responsibilities. TRADOC formulates information management and information systems management concepts and doctrine for the theater and tactical and strategic environments. PEO communications and PEO command and control are the materiel developers for information systems for the theater and tactical and strategic environments, less the Army portion of the Defense Information System. USAISC is the materiel developer for the Army's portion of the Defense Information System in the strategic environment. It provides Echelon Above Corps support in theater and tactical environment and provides sustaining base information services to include telecommunications. The Program Executive Officer for Standard Army Management Information System (PEO STAMIS) is the materiel developer for automated information systems, both tactical and sustaining base systems.

Sustaining base information management takes place at MACOMs and installations. The MACOMs provide staff supervision, coordination, and resourcing while the installation provides support directly to the users. Installation commanders are required to establish an installation information management support council to assist the commander/DOIM in coordinating and prioritizing IMA services for most installation activities.

The DOIM is responsible for the full range of information services for a specific geographic area. The support provided includes mobilization planning assistance for information services and, upon mobilization, information services support to federalized State Area Command Reserve Components (STARCs).

Information management encompasses all disciplines of the IMA:

- Telecommunications.
- Automation.
- Records management.
- Publishing and printing.
- Library management.
- Visual information.

Library management and visual information are IMA disciplines but may not be under the DOIM's control.

In USAREUR, information management is provided by the 5th Signal Command. Separate installation assets do not perform IM functions. 5th Signal is the DOIM support at each Area Support Group (ASG).

INFORMATION MANAGEMENT PROCEDURES AND PROCESSES

The DOIM manages the Army's information services at the installation level. The DOIM is an installation staff activity supporting all tenant organizations.

The DOIM develops and maintains the AIRMP and directly manages and supervises the information management staff and operational activities in the six IMA disciplines. Library management and visual information may report to different staff elements depending on the commander's prerogative. Through the administration of the AIRMP, the DOIM develops and maintains the installation's information architecture. The MACOM develops its architecture using structured methods, such as the Information Requirements Study (IRS). The result is a document that identifies information requirements and relationships and provides an organization with a macroview of its information needs, information deficiencies, and priorities. It maps high level information needs to the processes that create and use the information in support of the organization's mission and goals.

By comparing the information needs in the MACOM IRS model as shown in Figure 13-2 with the current capabilities, documented in DOD, Headquarters, DA, and MACOM plans, commanders can identify deficiencies and initiate requirements documents to correct the deficiencies. The IMA requirements or tenant activities are identified to the DOIM in terms of the IMA capability that is needed. Before proceeding, the DOIM will verify the nature of the IMA requirement, common-user versus unique IMA support; new start versus upgrade of existing IMA services/resources; capital investment versus expense type funds that will be needed, the availability of funding support, whether the IMA requirement is within the approval threshold of the installation, urgent out-of-cycle requirement versus in-cycle requirement. Unique, noncommon user IMA requirements must first be submitted by the tenant activity for verification/approval via command/functional proponent channels, before further processing by the DOIM. Additionally, if the requirement is beyond the

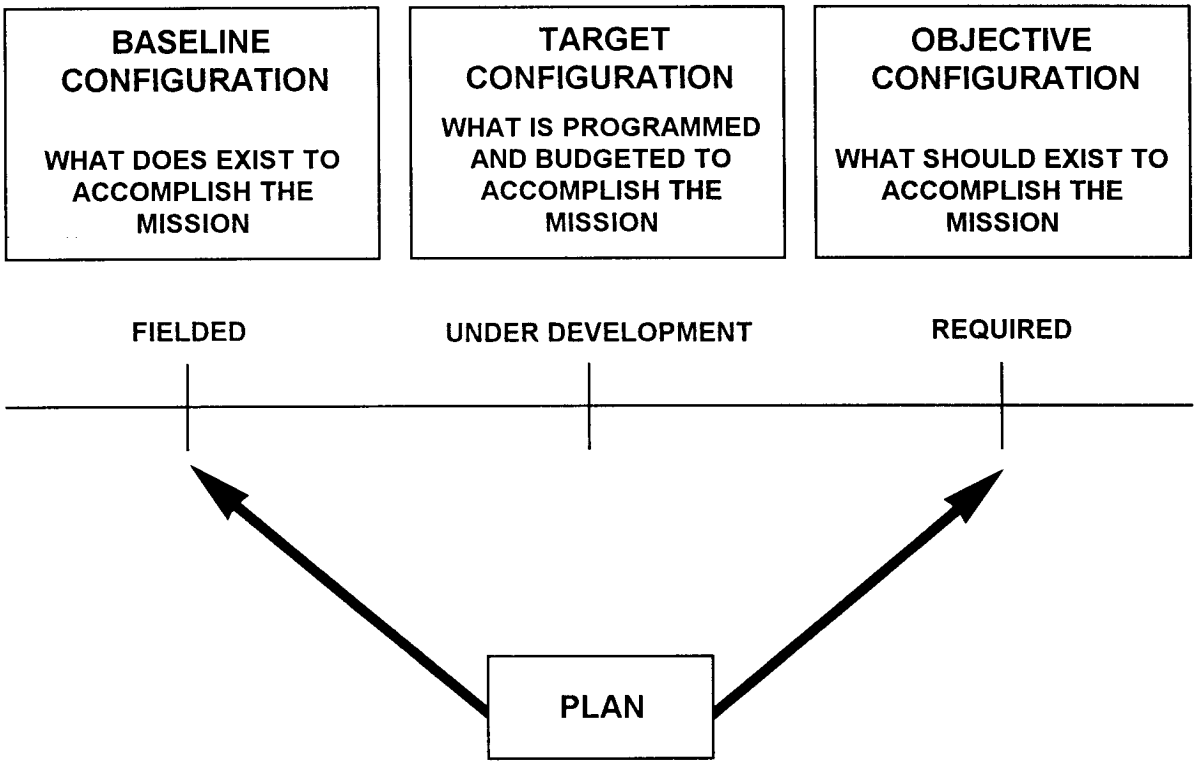

Figure 13-2. Information architecture components.

approval threshold of the installation, it must be submitted under IMA MOD Plan procedures for approval. The appropriate approval(s) of the IMA requirement serves as the basis for budgeting/programming of funds. Assuming the appropriate funding support is available, the DOIM proceeds with developing the most cost effective/efficient technical solutions to structure a proposed IMA project for approval by the DOIM or the installation commander via the Installation's Information Management Steering Committee. The same holds true for those IMA requirements that have been validated via command/functional proponent channels and/or approved via requirement statement submission by the tenant activity to its MACOM or by the DOIM to its MACOM, as appropriate, provided the submitting installation has been designated to develop and implement supporting IMA projects. The Information Management Support Council (IMSC) ensures that the priorities follow DA guidance and support all customers in a specific geographic area.

Requirement Statements (RS) are developed for those new information requirements that are not satisfied by the baseline and objective configuration. Installation commanders will validate and forward unmet requirements which exceed local authority to the next higher level for action. DISC4 integrates and DCSOPS prioritizes these requirements and publishes the RS Status Report for the Army, which authorizes these requirements to compete for funds in the next PPBES cycle. DISC4 also appoints/specifies materiel developer responsibilities.

Funding may be provided through the PPBES cycle and identified in OMA, RDTE, and OPA programs.

APPROVAL THRESHOLDS	
ESTIMATED REQUIREMENT	APPROVAL LEVEL
Under $2.5 million	MACOM approval
Between $2.5 and $10 million	HQDA Review
Over $10 million	HQDA MAISRC

Figure 13-3. Approval thresholds for IMA acquisitions.

OPA funds programmed by the materiel developer via the **Long** Range Research-Development and Acquisition Plan (LRRDAP) are required for hardware requirements costing more than the expense/investment threshold, currently $25,000. Approval thresholds for IMA acquisitions are described in Figure 13-3.

Mobilization information services support planning must be considered during the operational readiness improvement phase for Reserve Component forces while at the Mobilization Station. Essential services include all the basic services as outlined in Annex K of the Army Mobilization and Operations Planning and Execution System. Appointed DOIM offices have a supporting installation responsibility to provide mobilization information services planning assistance. Upon mobilization, the federalized STARCs also receive their support on a geographical basis.

MANAGEMENT ESSENTIAL

Information management is a valuable asset that can provide integrated information systems to all users. As requirements are developed, validation is a key process to ensure that interoperable systems are developed consistent with the principles of information management. The validation process must be accomplished via command channels. The prime function of validation is to ensure information requirements are essential to mission support. An integrated information management organization can improve installation productivity and enable more effective delivery of BASOPS services.

INFORMATION MANAGEMENT'S NEW DIRECTION

The end of the cold war and the subsequent reevaluation of our nation's Armed Forces structure has resulted in many significant changes to the Army. As the Army is downsizing to reflect new national policy realities and budget constraints, the Army is changing its strategy for fighting as well. During the past 100 years the Army strategy has evolved to one of forward deployed forces to respond to worldwide threats. This strategy is changing, as our overseas forces are downsized and reconsolidated in CONUS, to a new strategy of "Power Projection." The new strategy has been documented in the new FM 100-5, "Operation," in terms of split-based operations, at the strategic level. The impact upon installations is potentially dramatic, as they transition from peacetime training locations to warfighting enclaves as the Power Projection Base for future overseas task force deployments. Installation oriented projects that are gaining increased importance to enable the projection of IMA power at the Army's Power Projection installations will be summarized for several IMA disciplines.

TELECOMMUNICATIONS

Power Projection C4 Infrastructure (PPC41) is a Headquarters, DA initiative to upgrade the telecommunications infrastructure at Army installations to ensure it supports power projection. Planning for PPC41 began in FY92 and represents a major upgrade of telecommunications infrastructure for many CONUS installations in the past 40 years. Infrastructure upgrades are required to support the data transmission of many Army and joint service programs - Sustaining Base Information Services (SBIS), Defense Message System (DMS) that will be fielded in the next decade. PPC41 is not a separate program, but rather an initiative that combines four existing programs. The components of the telecommunications infrastructure are:

- The telephone switch.
- The outside cable plant.
- The backbone data network.
- The gateway to external networks, such as the Defense Data Network (DDN).

PPC41 supports the deployed commander by upgrading capacity and reliability of the infrastructure to which the deployed forces will connect for access to support agencies and information in all functional areas. PPC41 will synchronize the upgrade of all four infrastructure components to reduce the cost and disruption at each installation, and to prepare for the arrival of software programs whose data transmissions will require the enhanced capability. PPC41 fielding will be in accordance with an approved Installation Sequence List (ISL) corresponding to the DCSOPS and FORSCOM Force Package priorities, to ensure highest priority sites are completed first. At this time, the ISL focuses only on US CONUS installations (to include Alaska and Hawaii); however, future plans may include Reserve Component and OCONUS installations. Any installation telecommunications modernization and sustainment is managed through USAISC through ISEC-CONUS and the program manager for Switched Systems.

AUTOMATION

The SBIS program begins the process of transitioning the sustaining base to an open systems environment (OSE) by providing a centralized infrastructure acquisition and coordinating the transition of sustaining base applications software. Migration to OSE will promote competition, lower acquisition costs, reduce dependence on vendor unique systems, increase system interoperability, promote data sharing, and reduce operations and maintenance costs. The infrastructure will provide commercial off-the-shelf (COTS) hardware and system software, associated communications, and other common user items. The scope of the program addresses the initial modernization of validated and prioritized functional applications software and associated infrastructure. Support will be provided for selected Headquarters, DA systems, MACOM Internal Support Modules (MISM), Installation Support Modules (ISM), and required unique applications. The Army will continue to support, in parallel, existing applications and infrastructure until they are redesigned, converted, or replaced by systems operating in an OSE.

ISMs will provide commanders and tenant activities with integrated data and the ability to manage daily operations and functions more effectively. The ISM database will allow the installation user to extract common data and share information across installation organizations.

The ACSIM is the functional proponent for ISM. This standardization effort is to replace the many ad hoc systems now in operation. The DOD corporate information management has dictated that no new automated systems will be developed without a review of the business methodology of the functional area. The financial management community has already agreed to examine and restructure current business practices to standardize these functions.

There are 27 initial functional requirement documents identified and under development by the ISM project manager. The first group includes personnel, logistics, and financial management functions. Future ISM will undergo a rigorous development and testing cycle before fielding. These ISM will represent reengineered functions that will enable better service to the customer and respond to reductions in manpower, dollars, and time. The ISM provide single point data entry, standardization, elimination of manual processes, and reduction of redundant and duplicative systems.

Examples of ISM applications include the real property management tool (RMAT) and the directorate of

information management management information system (DOIMMIS).

RMAT will identify installation facility requirements, will develop and evaluate strategies to satisfy them, and will support decision making. RMAT will use spatial data systems technology (geographic information system) to allow dynamic querying of installation data bases and presentation of results in graphic or tabular format. This system will draw on and integrate several existing automated systems.

DOIMMIS focuses on managing the automation and communications assets available at the installation level with the DISN management philosophy and Integrated Systems Management Control Center (SBIS solution) structure; developing and controlling all capabilities and infrastructure needed to support those assets; and supporting military power projection concepts and Army C4I for the Warrior requirements. It introduces state-of-the-art technology for engineering, planning, and operations through the use of database driven graphics (spatial data technology (RMAT)) and statistical information to portray an event or situation.

Major Command Internal Support Modules (MISM) perform the same function at the MACOM level. The MISM, unlike the ISM, which are primarily transaction oriented systems, are more like Decision Support Systems, Report Generators, and Executive Information Systems. MISM are being developed and are also under the review of the Corporate Information Management and the financial community. MISM and associated ISM efforts could well change all aspects of our business procedures in the very near future.

RECORDS MANAGEMENT, PUBLISHING& PRINTING, AND LIBRARY MANAGEMENT

An initiative proposed as an ISM and currently being reviewed by Headquarters, DA is the Mass Mailing System. It will reduce postage and administration costs for repetitive mailing lists by automating the mass mailing tasks.

OFFICIAL MAIL AND DISTRIBUTION

The Army official mail program is operated on a pay-as-you-go basis. Payment for all United States Postal Service (USPS) support is by check, money order, or Advanced Deposit Trust Account (ADTA). Implementing guidance for the Army Official Mail and Distribution Program is found in AR 25-51. The DOIM is responsible for providing guidance and support for the program, which addresses the use of postage meters, mailing permits, special mail services, and postage stamps; procedures for prepaid postage; and correspondence distribution management. Instructions have been issued for implementation of Zip+ 4 at Army installations.

FIELD PRINTING

Every effort must be made to requisition field printing requirements from the Defense Printing Service (DPS). The DOIM is responsible for managing and providing guidance to customers on acquiring printing support needed for mission accomplishment. In the event of and during mobilization, authority is granted to the field to produce any departmental publication, including blank forms, necessary to support mission requirements.

VISUAL INFORMATION

Combat Camera (COMCAM) is visual information documentation (VIDOC) supporting the full range of Army operations including Joint, Combined, and Interagency Operations. Digital still imagery and motion imagery provide all levels of commanders and staffs with visual images of conditions and events before, during, and immediately after operations. Visual imagery assists commanders in making informed decisions during operations.

Training and Visual Information Support System (TRAVISS) provides Installation Training / Visual Information Support Centers with an automated application that will enhance operations and productivity while significantly improving management capabilities through real-time data availability. Its strength lies in its ability to provide on-line real-time management data to include supply balances, personnel time and performance data, work order activity, and equipment maintenance schedules. Customers will gain easy access

to support services such as color laser printing manuscript layout and review, still photography, local purchase support, graphics, and business preparations. TRAVISS will combine the best features of the automated systems currently in use across the Army, namely TRADOC's Work Order Management System/Audio Visual Library System (WOMS/AVLS) and FORSCOM's Training Support Automated Management System (TSAMS).

The Electronic Multimedia Imaging Center (EMIC) Plan provides for a centralized electronic capability at the installation level for creation, storage, and manipulation of visual images. This plan will guide MACOMs in the transition from wet chemistry processes to electronic processes in providing visual information products and services. Electronic imaging technology will encompass more than 350 visual information activities ArmyWide; these activities will change their names from VI centers to EMICs and be equipped with several different types of systems that provide graphics, photo, transmission, and self-help capabilities.

In the future installation-level information management products and services will enable operations personnel to seamlessly exchange information among BASOPS organizations, tenant activities, and higher headquarters. Distinctions among the various IMA disciplines will blur and then disappear. Using commercial technology, a small highly trained IMA work force will enable commanders to achieve high productivity gains and rapid support for decision making. New systems will be developed in strict conformance with standards to achieve interoperability and integration of systems throughout DOD, while dramatically reducing sustainment costs. DOD will exercise tight control over new development to ensure maximum reuse of DOD and joint systems.