

The Joint Capability Integration and Development System (JCIDS)

The Army constantly upgrades and changes the way it fights in order to maintain battlefield superiority over all potential adversaries.¹ Determining our future warfighting requirements is the centerpiece of the Army's race to maintain an "overkill" capability in each of its significant functional areas. Maintaining our margin of land warfare dominance is becoming increasingly difficult because technology is growing by leaps and bounds, and there are few, if any limitations on who obtains these technologies. Today any country or organization can acquire extremely sophisticated warfighting capabilities by purchasing them right off the open market. Facing this kind of challenge and the Army's steadily dwindling resources, our modernization decisions must be both well-reasoned and accurate. We cannot afford to guess, and be wrong; today's decisions will determine what our military is capable of 20 years hence. Accurately identifying capability needs today may literally be the difference between future victory or defeat.

The Joint Capabilities Integration and Development System (JCIDS) is the system we use to identify our capability needs. JCIDS implements a capabilities-based approach that better leverages the expertise of all government agencies, industry and academia to identify improvements to existing capabilities and to develop new warfighting capabilities. This approach requires a collaborative process that utilizes joint concepts and integrated architectures to identify prioritized capability gaps and integrated [DOTLMPF](#) solutions (materiel and nonmateriel) to resolve those gaps.

Links have been inserted throughout the text to enable you to quickly access definitions. It will help if you first click on the View portion of the toolbar, select Toolbars, and then select Web. To access a link or definition, move the cursor over the underlined expression, press and hold the Control key as you click the left mouse button. You will note that a green arrow appears on the far left of the Web toolbar. After you have accessed and read the definition of a term, you may click on the green arrow to return to the exact place in your text from where you accessed the hyperlink. This feature is being incorporated into other readings.

Objectives

1. Know the document that makes the case to establish the need for a materiel approach to resolve a specific capability gap.
2. Describe the process which identifies and establishes the need to resolve capability gaps.
3. List non-materiel and materiel alternatives for resolving capability gaps.
4. Know the user developed document which defines authoritative, measurable and testable capabilities needed by the warfighters.
5. Describe the roles of the combat developer in the JCIDS process. Describe the role of an integrated concept team (ICT).

¹ TRADOC Cdr.'s Black Book #3, *Requirements Determination*, dtd Mar 96, Forward by Army Chief of Staff,

Background

Deputy Secretary of Defense, Paul Wolfowitz issued a crucial policy memorandum on 30 October 2003, that cancelled the series of DoD 5000 acquisition policy documents and issued interim guidance to take the place of those documents.

“I have determined that the current DoD Directive 5000.1, ‘The Defense Acquisition System,’ DoD Instruction 5000.2, ‘The Operation of the Defense Acquisition System,’ and DoD 5000.2-R, ‘Mandatory Procedures for Major Defense Acquisition Programs (MDAPs) and Major Automated Information System (MAIS) Acquisition Programs,’ require revision to create an acquisition policy environment that fosters efficiency, flexibility, creativity, and innovation. Therefore, by separate memorandum, I have cancelled those documents effective immediately.”²

The acquisition system was changed to improve the process. The new policy provides for more flexibility and less oversight. Responsibility and decision authority is pushed to the lowest levels. “This initiative is part of an overall strategy to attract and retain a talented acquisition, technology and logistics workforce that will capitalize on more flexible policies to rapidly deliver affordable, sustainable capability to the warfighter.”³

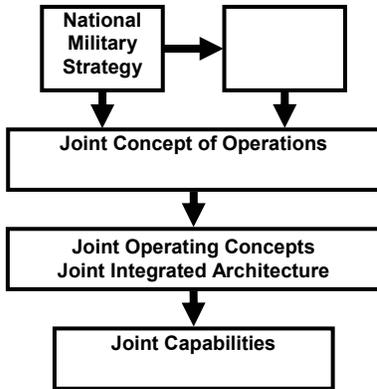
The JCIDS Process – Simplified

The Joint Capabilities Integration and Development System or JCIDS institutes a capabilities-based approach to identifying current and future gaps in our ability to carry out joint warfighting missions and functions. JCIDS provides an enhanced methodology for identifying and describing capability gaps and proposals; it provides a broader review of proposals by bringing in additional participants including the acquisition community early in the process.

JCIDS is being implemented through a Chairman’s Instruction and companion Manual. It was developed in close collaboration with the DOD 5000 series development. Chairman’s Instruction 3170.01C provides the policy and top-level description of the JCIDS. The Instruction also gives the organizational responsibilities for everyone necessary for making the process effective. Chairman’s Manual 3170.01 provides the details necessary for the action officers who will be performing the day-to-day work of identifying, describing, and justifying warfighting capabilities.

² Policy memorandum, Cancellation of DoD 5000 Defense Acquisition Policy Documents, Deputy Secretary of Defense, Paul Wolfowitz, 30 October 2002.

³ Releasing the Power of Innovation in Acquisition Management, Barbara Rostosky Brygider, PM Magazine, November-December 2002.

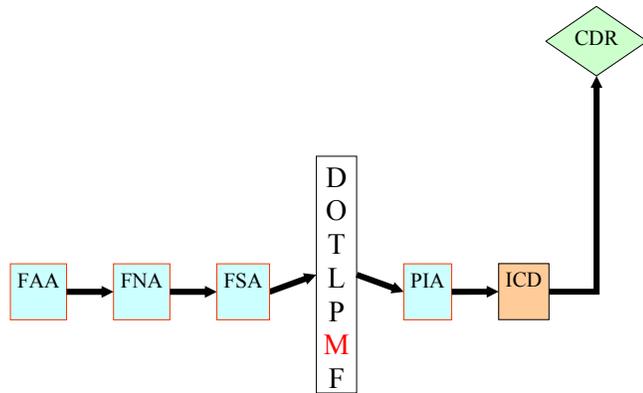


The fundamental change in JCIDS from the previous requirements system is that it is based on top-down analyses rather than bottom-up requirements generation. The focus of JCIDS is to perform the necessary analyses early in the development of a capability, when the Joint Requirements Oversight Council ([JROC](#)) can have the most influence on the resulting system.

The first analysis performed is the Functional Area Analysis (FAA). The FAA identifies the operational tasks, conditions and standards needed to achieve

military objectives.

Next, the Functional Needs Analysis assesses the ability of the current and programmed capabilities to accomplish the Functional Area Analysis identified tasks, under the full range of operating conditions and to the designated standards. The result is a list of capability gaps.



The Functional Solutions Analysis (FSA) performs an operational based assessment of potential approaches to solving one or more of the existing capability gaps. The result is a set of potential materiel and non-materiel approaches to fixing the capability gaps. The potential approaches are derived in the following order of precedence; doctrine, organization, training, leadership, personnel, materiel and facilities (D-O-T-L-P-M-F), based on expense and timeliness to field a capability.

Doctrine. A doctrinal modification involves changes or additions to the principles used to guide the employment of operational forces. These principles range from a multitude of tactics, techniques and procedures (TTP) to the Army’s capstone document, FM 3-0, *Operations*. School combat developments directorates are responsible for preparing doctrine requirements and forwarding them to HQ, TRADOC for approval.

Organization. An organizational modification involves changes or additions to any of the Army’s tables of organization and equipment (TOE). These range from modifying the numbers or types of equipment in a current organization to documenting an entirely new organization. From just altering the quantity of people and equipment authorized in a unit, to developing an entirely new unit design. School combat development directorates and other combat development organizations are responsible for preparing organization requirements and then forwarding them to HQ TRADOC for approval. The TRADOC DCSCD reviews,

integrates and prioritizes action. A list of approved TOEs is maintained in the Structure and Manpower Allocation System (SAMAS) Army Master Force (MFORCE) and are resourced based on overall Army Force Package needs.

Training & Leadership. A training modification involves changes or additions to any of the Army's training or professional development programs. These range from institutional training conducted at TRADOC schools to individual self-development and unit training programs conducted in the field [Army]. School training and doctrine directorates are also responsible for preparing training requirements and forwarding them to HQ TRADOC for approval. Leader development solutions can change the way in which leaders are being educated or trained. Alternatively, they could lead to a change in the kind of people we access into the Army.

Personnel. TRADOC POC for soldier requirements is Leader Development Division, Individual Training Directorate, DCST, HQ TRADOC (ATTG-IL). Detailed soldier requirements guidance is in ARs 600-3 and 611-1. Soldier requirements include additions, deletions, or modifications to the Army's MOCS system. These range from proposals affecting the force and/or grade structure of existing occupational specialties to the creation of entirely new occupational specialties to accomplish assigned missions. Personnel proponent offices are responsible for preparing these soldier requirements, assuring their compatibility with other domains.

Matériel. A matériel solution will be considered only when non-matériel (DOTLPMF) answers cannot satisfy the identified need. Once a matériel solution is identified as the solution to a specific need, the combat developer initiates actions which (if successful) will lead to the fielding of a matériel system.

Facilities. Although often thought of as a matériel solution, facilities solutions are one of the six non-matériel solutions.

The final step in the analysis process is the Post-Independent Analysis. The objective of this analysis is to review the previously done analyses and identify which approach or approaches best address the previously identified capability gaps. The results are documented either in a recommended change or an Initial Capabilities Document.

There are three new documents defined to support the JCIDS process, the Initial Capabilities Document ([ICD](#)), the Capability Development Document ([CDD](#)), and the Capability Production Document ([CPD](#)).

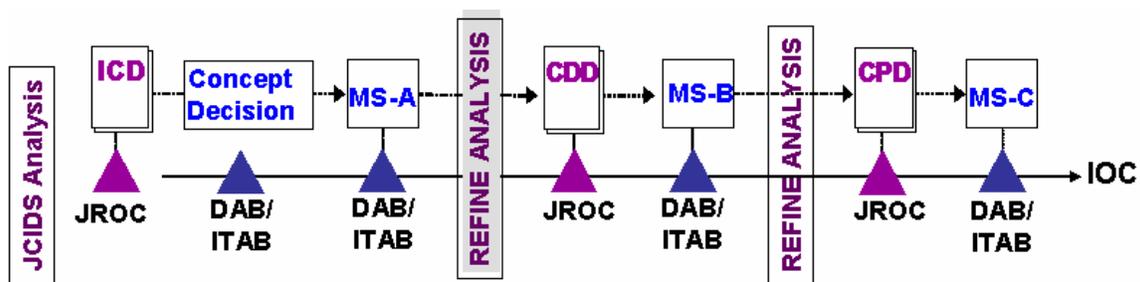
The ICD provides the definition of the capability need and where it fits in the broader concepts and architectures. The ICD summarizes the results of DOTLPMF analysis and identifies any changes in US or allied doctrine, operational concepts, tactics, organization and training that were considered in satisfying the deficiency. The ICD will also describe why such nonmaterial changes have been judged to be inadequate in addressing the

complete capability. The ICD is used to support the concept refinement and Milestone A decisions and to guide the Concept Refinement and the Technology Development phases of the acquisition system.

Upon completion of the Technology Development phase, a Capability Development Document ([CDD](#)) is written. The CDD is the primary means of defining authoritative, measurable and testable capabilities needed by the warfighters to support the System Development and Demonstration phase of an acquisition program. The CDD captures the information necessary to deliver an affordable and supportable capability using mature technology within a specific increment of an acquisition strategy. The CDD supports a Milestone B decision by providing more detail on the materiel solution to provide the capability previously described in the ICD.

Once the system has been through Design Readiness Review (DRR), the final document, the Capability Production Document ([CPD](#)) is developed. The CPD is the primary means of providing authoritative, testable capabilities for the Production and Deployment phase of an acquisition program. The CPD captures the information necessary to support production, testing, and deployment of an affordable and supportable increment within an acquisition strategy. The CPD is used to support the Milestone C decision before a program enters Low Rate Initial Production ([LRIP](#)) and Initial Operational Test and Evaluation ([IOT&E](#)). The CPD may refine the attribute thresholds from the CDD based on lessons learned during the Systems Development and Demonstration phase.

Because the concepts and integrated architectures upon which the analyses are based are not fully available and mature, the JCIDS retains the use of the Capstone Requirements Document ([CRD](#)). The CRD will continue to be used to describe the standards that apply to classes of systems.



The JCIDS has been developed in close coordination with the development of the new DOD 5000 series to ensure effective integration of the capabilities identification and acquisition processes. As the above diagram shows, the JCIDS documents and JROC approval directly support the Defense Acquisition Board in making the milestone decisions.

Integrated Concept Teams. The core body for the initiation and development of capability needs is the ICT. The ICT management philosophy employs the team approach to requirements determination actions. ICTs maximize the efforts of reduced resources by early resolution of issues through timely involvement of appropriate agencies/expertise as a team with a commitment to aggressively identify and work issues. In its role as architect of the future, TRADOC employs these multi-disciplinary ICTs representing appropriate MACOMs and staffs, appropriate DoD organizations, and other federal agencies. Industry and academia may also participate. ICTs are the primary means for horizontal integration in the DOTLPMF analysis. A single ICT may identify the need for several different DOTLPMF approaches to support a warfighting capability that crosses multiple branches or enduring battlefield functions. A primary goal of the ICT process is to shorten the pre-acquisition process.

Fundamental characteristics of ICTs:

- Have a clear agenda, schedule, and deliverables
- Are multi-disciplinary.
- Have members who are empowered to make decisions.
- Have a holistic, total force perspective.
- Seek DOTLPMF solution sets.
- Consider both conventional and innovative concepts and solutions.
- Consider near, mid, and long term capabilities and opportunities.
- Can be tier one or tier two. HQ TRADOC charters Tier 1 ICTs.
- Promote horizontal requirements integration/horizontal technology integration (HRI/[HTI](#))

Integrated Concept Team (ICT) establishment and general guidelines

Initiation - ICTs will be initiated by the TRADOC CG, Deputy Commanding Generals (DCGs), DCSs, or School Commandants/Center Commanders. The individual initiating the ICT must make a determination whether to establish a tier one or tier two ICT.

Tier one

Scope - Tier one ICTs are established to develop concepts and the resulting requirements documentation when there are multiple proponents or proponenty has yet to be determined. HQ TRADOC may direct the establishment of a Tier one ICT and designate the Tier one lead. Tier one ICTs have high management interest and visibility (HQDA, OSD, or Congress); major joint Service impact; or require HQ TRADOC delegated authority and command level resources, if appropriate, to conduct the ICT. These ICTs are approved and chartered by HQ TRADOC.

Proposal - A Tier one ICT proposal is not required if the ICT is directed by HQ TRADOC. Proponent recommended Tier 1 ICTs are initiated by submitting an ICT proposal to the appropriate HQ TRADOC functional directorate. This allows for

expeditious coordination of the emerging ICT at the idea stage before major command resources are expended. An E-mail submission is acceptable. The appropriate HQ TRADOC functional directorate reviews the proposal for potential integration with other ICTs and with other TRADOC requirements determination efforts. A proposal response, with a suggested core membership list and appropriate directions, is usually provided back to the originator. (The response normally requires that the originator develop and submit a charter to the HQ TRADOC functional directorate for CofS, TRADOC approval). However, if other factors are involved (e.g., redundancy, change of scope, joint Service implications, major command resource commitments), the HQ TRADOC functional directorate conducts the necessary coordination (internal and external) prior to a final decision on the ICT's scope and lead. Following this coordination, appropriate instructions, including a designation of the ICT lead, are forwarded back to the originator and other impacted organizations. Under these circumstances, the lead for the ICT may be an organization other than the originator of the proposal.

Tier Two

Tier two ICTs are used to develop or refine a concept unique to a single proponent or to determine and document branch unique capability requirements. Tier two ICTs are usually established and conducted under the guidance of school Commandants or center commanders but may be directed by HQ, TRADOC. Tier two ICTs initiated by a proponent designate the ICT lead and charter the ICT. Proponent initiated ICT leads will notify the appropriate HQ TRADOC functional directorate via E-mail and provide at least the following information: ICT name, originator, deliverables and/or products, estimated completion date, participating organizations, point of contact name and contact information. HQ TRADOC posts this information on the DCSDOC Homepage.

The Joint/Army Concepts Directorate (ATDO-C) is responsible for the final review and processing of the ICT charter through the DCSDOC to CofS TRADOC.

ICT Membership - There are two groups of ICT membership - the Core membership and the Staffing membership. The Core membership has the primary responsibility for developing and coordinating the product, working the resolution of issues, and submission of the product for approval. Dedicated Core ICT members serve as the ICT's nucleus, accomplishing most of the planning and work. On-call Core ICT members provide input to the product and assists in resolution of issues within their specialized expertise or provides experimental, analytical, operational, and technological advice and support to the dedicated Core team.

Staffing ICT members review the draft product and submit their issues and comments. Resolution of issues to the satisfaction of the Staffing ICT member constitutes concurrence by that member's organization. Unresolved issues from either the Core or Staffing ICT members constitute a non-concurrence by that member's organization and are addressed and resolved during the approval process. ICT membership and participants vary, depending on the specific product being produced.

The ICT charter identifies membership and participating organizations. While industry and academia are not members of the ICT, their input is a key ingredient to the process. Techniques to obtain industry and academia input must be executed properly to avoid significant consequences for government, academia, and industry participants. ICT leaders must seek advice and assistance from their legal and contracting offices during the early ICT strategy planning stage and continually during the ICT process

ICT process

Charter. The ICT lead drafts and coordinates the charter with all Core ICT member organizations. The ICT charter addresses, with sufficient detail for ICT planning and resource decisions, the same areas included in the ICT proposal. For Tier one ICTs, the final draft charter is forwarded to the HQ TRADOC functional directorate for review and approval by the TRADOC CofS. The ICT charter must contain enough detail to allow HQ TRADOC to prioritize ICT support resources (e.g., analysis, Battle Lab experimentation and the TRADOC Installation Contract) and coordinate with other requirements determination efforts. For Tier two ICTs, a copy of the commander/commandant approved charter is forwarded to the HQ TRADOC functional directorate. Resourcing for Tier two ICTs is the responsibility of the proponent and membership as re-occurring missions delineated within the yearly TRADOC Installation Contract.

Read-ahead for Core ICT. The ICT lead develops and provides a read-ahead package to the Core ICT member organizations. Packages include background information; strawman ICT action plan with milestone schedule, issues and opportunities, and emerging tasking and support responsibilities; and, when applicable, strawman materiel requirements documents with initial drafts of the operational mode summary/mission profile (OMS/MP) and the system training plan (STRAP). These strawman documents are not expected to be complete, ready to coordinate documents, but rather are to be first-cut documents that require input from Core ICT members. The forwarding memorandum for the read-ahead includes a request for designation of an individual to serve as an ICT Core member. The individual is empowered to actively participate in the ICT, provide advice and input to the product, identify issues, and represent their organization on any issues, opportunities, or tasking identified in the Action Plan. The Action Plan must address how an assessment of industry and academia technology capabilities will be obtained by the ICT.

Convene the Core ICT. The Core ICT may be convened by any appropriate mechanism (e.g., exchange of papers/electronic media, video teleconference, telephonic conference(s), or meeting). The Core ICT includes both dedicated and on-call members. On-call members provide their input to the product but are not required for full participation (e.g., a Battle Lab may be required early to identify the need for experimentation and later to explain experiment results).

The mission of the Core ICT is to produce the ICT product for coordination and assist the ICT Chair in resolution of comments and issues received during staffing. The first

order of business is to finalize the ICT Action Plan including supporting analysis, experimentation, resources, and tasking/responsibilities essential to develop ICT products and deliverables. A critical element of the ICT planning and operations is establishing appropriate linkages with related ongoing ICTs and other affected or supporting organizations. The second order of business is to implement and execute the Action Plan.

ICT products. The full ICT membership may produce the following products:

Concepts - A Tier one ICT produces both the draft concept (capstone or subordinate) for coordination and the final concept for submission to HQ TRADOC for approval. The ICT also publishes minutes that describe the resolution and disposition of each issue, identify supporting information that cannot be provided in the product, and convey any issue for further study.

- Functional Needs Analysis (FNA). The ICT produces a FNA for approval by the authority that chartered the ICT.

Materiel Requirements Documents (MRDs). The ICT produces the ICD, CDD, and CPD. The ICT develops the coordination draft and final draft MRDs. It also publishes minutes that provide an audit trail describing the resolution and disposition of each issue and identifying any areas needing further study for resolution and/or attention of MATDEV IPT(s), (e.g., MANPRINT issues). Development of MRDs will require a System Training Plan (STRAP).

- Simulation Support Plan (SSP). The ICT produces the initial plan for management and use of simulations in support of a materiel system and to support the goals of Simulation and Modeling for Acquisition, Requirements and Training (SMART) goals. The plan addresses Modeling and Simulation (M&S) use for assessment of sustainment issues, testing, and training for materiel development purposes. The SSP is a dynamic plan, which will change as the concept matures and will eventually transition to a program manager. The intent of an SSP and SMART is to facilitate the use of M&S standards, to promote the reuse of software when feasible, and to provide a collaborative environment to reduce the time and cost of materiel system development through efficient and effective use of M&S.

ICT Product Review. Key to the success of the ICT process is the early identification and resolution of issues. While the Core ICT works numerous issues during preparation of the draft, staffing responses that specifically identify issues and provide comments are critical to quickly producing an adequate and supported document. Issues reflect an area of non-concurrence if not resolved to mutual satisfaction of affected ICT members. Unresolved issues become decision issues for the document approval authority. Comments reflect suggestions for consideration by responsible ICT members. Staffing ICT member organizations will identify the individual empowered to represent their organization during issue resolution.

Issue Resolution. Issues will be resolved within the ICT, when possible. Core ICT members review the issues identified from staffing. An issue that cannot be resolved in the ICT, will be presented immediately to director or to general officer (GO) levels within affected member organization for resolution. Any issues not resolved will be submitted with the ICT product to HQ TRADOC (or, when applicable, to the chartering commander/commandant) for decision during the final approval. Senior leadership will be briefed, as necessary, to build support for results and products.

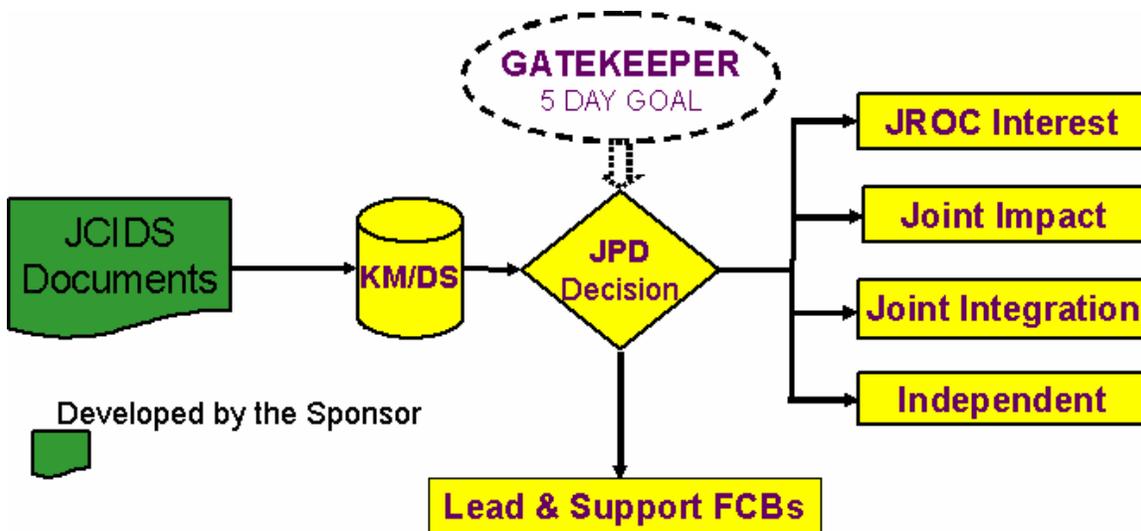
Coordination. HQ TRADOC functional directorates will coordinate individual ICTs with other ongoing TRADOC ICTs. Once an ICT is completed, these directorates will coordinate the results with other concept development efforts.

A listing of all ongoing ICTs is maintained on the DCSDOC homepage (<http://www.tradoc.army.mil/dcsdoc>).

The JCIDS Staffing Process

The process of obtaining validation and approval of JCIDS documents begins with the submission of a document to the Knowledge Management/Decision Support tool. The Gatekeeper will review the document to determine whether the proposal affects the joint force.

The function of the JCIDS Gatekeeper was created to ensure that proposals are evaluated for joint warfighting impact and assigned to the correct staff for analysis and coordination. When the Joint Staff receives a JCIDS document, the Gatekeeper will determine the joint potential designator, the lead Functional Capabilities Board, and the lead Joint Warfighting Capability Assessment Team.



Within JCIDS there are four JPD designations a proposal can receive based on their acquisition category and their potential for impacting the joint warfighter. These joint

potential designators are: JROC Interest, Joint Impact, Joint Integration, and Independent. This joint designation determines who validates and/or approves a proposal.

The Joint Impact designation is assigned to those proposals with significant impact on the joint force, but which do not require JROC oversight. Joint Impact proposals will be validated by the Functional Capabilities Board and returned to the sponsor for approval and implementation.

The Joint Integration designation applies to those proposals that require intelligence, munitions or interoperability certifications. Joint Integration proposals will be submitted through the certification process before being returned to the sponsor for validation and approval.

The Independent designation is assigned to those proposals that have no direct impact on the joint warfighter. These proposals will be returned to the sponsor for further action.

Once the Gatekeeper completes the initial review, the document comes under the purview of the Functional Capabilities Board (FCB). Only the JROC can charter a Functional Capabilities Board. The JROC will also assign the functional areas to the FCB and identify the organization that will chair the FCB. Initially, the JROC has chartered an FCB at Joint Forces Command to oversee capabilities affecting Joint Force Command and Control.

Nominal FCB Membership (Lead by a 1-Star Equivalent)

Principal Membership (O-6/GS-15 representatives)

- Services
- Combatant Commanders
- USD for Acquisition, Technology, and Logistics
- USD for Intelligence
- ASD for Networks and Information Integration/DoD Chief Information Officer
- USecAF (Space)
- Defense Intelligence Agency
- Director, Program Analysis & Evaluation
- Mission Requirements Board Executive Secretary

Advisory Membership

- JWCA leads
- J-6E/I (interoperability advisor)
- J-8 Warfighting Concepts and Architectures Integration Division
- DOD laboratories & industry

This slide demonstrates that the typical membership of an FCB goes far beyond the traditional membership of the services under the previous system. It demonstrates the commitment to being more inclusive in making decisions on joint capabilities.

In summary, you have read an overview of the new Joint Capabilities Integration and Development System to include the process, associated documents, and the Functional Capabilities Board. Utilization of this system will result in capabilities that support the joint warfighter.

Review Questions

1. What document makes the case to establish the need for a materiel approach to resolve a specific capability gap? ([Answer](#))
2. Describe the process which identifies and establishes the need to resolve capability gaps. ([Answer](#))
3. Name the six non-materiel alternatives for resolving deficiencies. ([Answer](#))
4. What is the user developed document that defines authoritative, measurable and testable capabilities needed by the warfighters? ([Answer](#))
5. What is the core body responsible for the initiation and development of capability needs? ([Answer](#))
6. What are the two groups of ICT membership? ([Answer](#))

Definitions

Acquisition Category IAM (ACAT IAM)	A major automated information system (MAIS) acquisition program for which the MDA is the Chief Information Officer (CIO) of the Department of Defense (DOD), the ASD (C3I). <i>CJCSI 3170.01B</i>
Acquisition Category IC (ACAT IC)	ACAT IC programs, delegated to the Army, are Major Defense Acquisition Programs (MDAP) for which the MDA has been designated as the AAE. These programs receive an Army Systems Acquisition Review Council (ASARC) review and require a decision by the AAE at each milestone review. <i>AR 70-1</i>
Acquisition Category ID (ACAT ID)	A major defense acquisition program (MDAP) for which the MDA is USD (AT&L). The "D" refers to the Defense Acquisition Board (DAB), which advises the USD (AT&L) at major decision points. <i>CJCSI 3170.01B</i>
Acquisition Category II (ACAT II)	ACAT II programs are acquisition programs that do not meet the criteria for an ACAT I program, but do meet the criteria for a major system. These programs are managed by a PM who reports to a PEO or a materiel command as designated by the AAE. These programs receive an Army Systems Acquisition Review Council (ASARC) review and require a decision by the AAE at each milestone review. <i>AR 70-1</i>
Capability Development Document (CDD)	A formatted statement containing performance and related operational parameters for the proposed concept or system. Prepared by the user or user's representative at each milestone beginning with Milestone B.
Capability Production Document (CPD)	A final version of the CDD which describes the ultimate capabilities required of the system. It describes the functions of the item to be produced.
Capstone Requirements Document (CRD)	A document that contains capabilities-based requirements that facilitates developing an individual ORD by providing a common framework and operational concept to guide their development. It is an oversight tool for overarching requirements for a system-of-systems or family-of-systems. <i>CJCSI 3170.01A</i>

<p>Combat developer (CBTDEV)</p>	<p>Command or agency that formulates and documents operational concepts, doctrine, organizations, and or materiel requirements (MNS and ORD) for assigned mission areas and functions. Serves as the user representative during acquisitions for their approved materiel requirements as well as doctrine and organization developments. <i>AR 71-9</i></p> <ul style="list-style-type: none"> ▪ TRADOC is the Army’s largest combat developer. ▪ Medical Command (MEDCOM), Space and Missile Defense Command (SMDC), and Intelligence and Security Command (INSCOM) are other combat developers.
<p>Defense Acquisition Board (DAB)</p>	<p>The DAB shall advise the Under Secretary of Defense (Acquisition, Technology, and Logistics) on critical acquisition decisions. The Under Secretary of Defense (Acquisition, Technology, and Logistics) shall chair the DAB, and the Vice Chairman of the Joint Chiefs of Staff shall serve as vice-chair. DAB membership shall comprise the following executives: Under Secretary of Defense (Comptroller); Under Secretary of Defense (Policy); Under Secretary of Defense (Personnel & Readiness); Assistant Secretary of Defense (Command, Control, Communications, and Intelligence)/Department of Defense Chief Information Officer; Director, Operational Test and Evaluation; and the Secretaries of the Army, Navy, and the Air Force. The reviews shall focus on key principles to include interoperability, time-phased requirements related to an evolutionary approach, and demonstrated technical maturity. <i>DoD 5000.2-R</i></p>
<p>Doctrine, Organization, Training, Leader Development, Materiel, Personnel and Facilities (DOTLMPF)</p>	<p>Solutions to capability gaps are determined in the order of doctrine, training, leader development, organization, personnel, facilities and materiel (DOTLMPF), based on expense and timeliness to field a capability. TRADOC PAM 71-9 identifies the procedures needed to develop requirements documents across the DOTLMPF domains and leads to specific documentation that outlines the procedures for warfighting requirements determination in those domains.</p>
<p>Horizontal Technology integration</p>	<p>Provides for the application of common technology across multiple systems or items to improve the warfighting capability of the force. It is a modernization requirements and acquisition process in which technology is simultaneously integrated into different weapon systems. <i>DA PAM 70-3</i></p>

Initial Capabilities Document (ICD)	The ICD describes materiel capabilities in broad, time-phased and operational goals. The ICD document is written to accommodate the widest range of possible materiel solutions.
Integrated Concept Team (ICT)	<p>An integrated team made up of people from multiple disciplines formed for the purposes of developing operational concepts, developing materiel requirements documents, developing other DTLOMS requirements documents, when desired, and resolving other requirements determination issues. <i>AR 70-1</i></p> <p>The ICT produces the ICD, capstone requirements document (CRD), and CDD. ICTs are formed to accomplish the following:</p> <ol style="list-style-type: none"> (1) Develop capstone and subordinate TRADOC Pam 525-series concepts and associated future operational capabilities (FOCs). (2) Develop new and validate current FOCs published in TRADOC Pam 525-66. (3) Determine and document warfighting mission needs analysis across all DTLOMS domains. <i>TRADOC PAM 71-9</i>
Integrated Product Team (IPT)	A working level team of representatives from all appropriate functional disciplines working together to build successful and balanced programs, identify and resolve issues, provide recommendations to facilitate sound and timely decisions. <i>AR 70-1</i>
Interoperability	Interoperability is the ability of systems, units, or forces to provide data, information, materiel, and services to and accept the same from other systems, units, or forces, and to use the data, information, materiel, and services so exchanged to enable them to operate effectively together. Interoperability within and among United States forces and U.S. coalition partners is a key goal that must be satisfactorily addressed for all Defense systems so that the Department of Defense has the ability to conduct joint and combined operations successfully. The use of standardized data shall be considered to facilitate interoperability and information sharing. The Department of Defense must have a framework for assessing the interrelationships among and interactions between U.S., Allied, and coalition systems. Mission area focused, integrated architectures shall be used to characterize these interrelationships. This end-to-end approach focuses on mission outcomes and provides further understanding of the full range of interoperability issues attendant to decisions regarding a single program or system.

<p>Initial Operational Test and Evaluation (IOT&E)</p>	<p>All operational test and evaluation conducted on production or production representative articles, to support the decision to proceed beyond low-rate initial production for a weapon system program, or to deploy the tested capability for an AIS program. It is conducted to provide a valid estimate of expected system operational effectiveness and operational suitability. IOT&E shall use production representative systems, actual operational procedures, and personnel with representative skill levels.</p>
<p>Joint Requirements Oversight Council (JROC)</p>	<p>The JROC has the following responsibilities:</p> <ul style="list-style-type: none"> (1) Assist the Chairman in coordinating, among combatant commands, Service force providers, and other DOD components, the identification and assessment of joint requirements and priorities for current and future military capabilities, forces, programs, and resources, consistent with the National Military Strategy (NMS) and the total resource levels projected by the Secretary of Defense in the DPG and fiscal guidance. (2) Assist the Chairman in providing up-front guidance, oversight, and validation on complex requirements integration. (3) Assist the Chairman in developing and/or validating operational and mission area integrated architectures and operational concepts required by the NMS and to facilitate the realization of JV 2020 warfighting capabilities. (4) Assist the Vice Chairman of the Joint Chiefs of Staff in his role as the Vice Chairman of the Defense Acquisition Board (DAB) by reviewing and approving military need and joint interoperability requirements for potential ACAT I programs, JROC Special Interest programs, and Major Acquisition Information Systems (MAIS) as may be directed by the Secretary of Defense or Chairman of the Joint Chiefs of Staff; and by considering cost, schedule, and performance and nonmaterial alternatives for acquisition programs identified to meet military needs (i.e., alternatives involving changes in doctrine, tactics, training, or organization). CJCSI 5123.01A
<p>Key Performance Parameters (KPP)</p>	<p>Those capabilities or characteristics considered most essential for successful mission accomplishment. Failure to meet a key performance parameter threshold (KPP) in the Capabilities Development Document (CDD) can be cause for the concept or system selection to be reevaluated or the program to be reassessed or terminated. KPP are validated by the JROC. KPP in the CDD are included in the Acquisition Program Baseline (APB).</p>

Low Rate Initial Production (LRIP)	<p>The objective of this activity is to produce the minimum quantity necessary to: provide production configured or representative articles for operational tests, establish an initial production base for the system; and permit an orderly increase in the production rate for the system, sufficient to lead to full-rate production upon successful completion of operational testing.</p> <p>LRIP quantities for all ACATs shall be minimized. The MDA shall determine the LRIP quantity for all ACAT I and II programs as part of the Engineering and Manufacturing Development (EMD) approval. The LRIP quantity (with rationale for quantities exceeding 10% of the total production quantity documented in the acquisition strategy) shall be included in the first SAR after its determination. The LRIP quantity shall not be less than one unit and any increase shall be approved by the MDA. When approved LRIP quantities are expected to be exceeded because the program has not yet demonstrated readiness to proceed to full-rate production, the MDA shall assess the cost and benefits of a break in production versus annual buys. Note: DOT&E is the decision authority for the number of LRIP articles required for Initial Operational Test and Evaluation (IOT&E) and for Live Fire Test and Evaluation (LFT&E). LRIP is not applicable to ACAT IA programs; however, a limited deployment phase may be.</p>
Materiel Developer (MATDEV)	<p>The RDA command, agency, or office assigned responsibility for the system under development or being acquired. The term may be used generically to refer to the RDA community in the materiel acquisition process (counterpart to the generic use of CBTDEV). <i>AR 70-1</i></p>
Milestone Decision Authority (MDA)	<p>The individual designated in accordance with criteria established by the Under Secretary of Defense for Acquisition, Technology, and Logistics, or by the Assistant Secretary of Defense for Command, Control, Communications and Intelligence (CIO) for AIS programs, to approve entry of an acquisition program into the next phase of the acquisition process. <i>DoDD 5000.1</i></p>
Milestone Decision Review (MDR)	<p>MDRs are formal decision briefings to the milestone decision authority (MDA). These reviews provide the gateway for program progress through the acquisition phases.</p>
Overarching Integrated Product Team (OIPT)	<p>The OIPT is a team appointed by the MDA, commensurate with the ACAT level, to provide assistance, oversight and independent review for the MDA, as the program proceeds through its acquisition cycle. <i>AR 70-1</i></p>

<p>Overarching Integrated Product Team (OIPT) Leader</p>	<p>The person in the Office of the Secretary of Defense who leads the Overarching Integrated Product Team and is responsible for providing an assessment of each assigned program. The OIPT Leader is not in the decision-making line of authority for programs. <i>DoDI 5000.2</i></p>
<p>Spiral Development</p>	<p>In this process, a desired capability is identified, but the end-state requirements are not known at program initiation. Those requirements are refined through demonstration and risk management; there is continuous user feedback; and each increment provides the user the best possible capability. The requirements for future increments depend on feedback from users and technology maturation.</p>
<p>Threat</p>	<p>Ability of an enemy or potential enemy to limit, neutralize, or destroy effectiveness of current or projected mission, organization, or item of equipment. Statement of that threat is prepared in sufficient detail to support Army planning and development of concepts, doctrine, training, and materiel. Statement of a capability prepared in necessary detail, in context of its relationship to specific program or project, to provide support for Army planning and development of operational concepts, doctrine, and materiel. AR 381-11</p>