DoD Directive 7045.20

Capability Portfolio Management

Originating Component:	Office of the Under Secretary of Defense for Acquisition and Sustainment
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Approved by:	Kathleen H. Hicks, Deputy Secretary of Defense

Purpose: This issuance:

- Pursuant to Section 113 of Title 10, United States Code (U.S.C.), establishes policy for using capability portfolio management (CPM) across the DoD to advise senior leadership on capability investment, divestment, and management.
- Assigns responsibilities regarding CPM to support the DoD senior governance framework structure in DoD Directive (DoDD) 5105.79 to synchronize decision support across the planning, programming, budgeting, execution, requirements, and acquisition processes.
- Provides procedures for managing portfolios. A waiver to the standards in DoD Instruction 5025.01 for DoD directives has been granted to accommodate current CPM requirements.

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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY.

This issuance applies to OSD, the Military Departments, the Office of the Chairman of the Joint Chiefs of Staff (CJCS) and the Joint Staff, the Combatant Commands, the Office of Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the "DoD Components").

1.2. POLICY.

a. CPM will:

(1) Drive strategic alignment across planning, requirements, technology, acquisition, sustainment, programming, budgeting, and execution. Senior leadership will use CPM as part of the DoD's decision support systems to inform capability improvements through the lens of joint, integrated mission effects. CPM analysis will employ the Analysis Working Group (AWG) principles and standards to ensure that analytic products aimed at informing strategic decisions are robust, transparent, and well-designed. The AWG structure as a supporting tier governance forum is described in DoDD 5105.79 and the April 5, 2021 Deputy Secretary of Defense (DepSecDef) memorandum, and its principles and standards were endorsed in the February 2, 2022 DepSecDef memorandum.

(2) Be data driven. CPM will leverage schedule, cost, and performance metrics for systems and interdependencies among portfolio elements to identify options to close capability gaps and synchronize development and fielding priorities.

(3) Be focused on maximizing capability effectiveness, enabled through mission integration management (MIM) and mission engineering, to advise DoD leadership on ways to optimize overall mission capability through managing strategy driven, achievable, and affordable capability portfolios that balance near-term and long-term objectives.

b. DoD Components define and manage different portfolios for various purposes across the defense enterprise. Reflecting CPM's focus on joint warfighting missions, the joint capability area (JCA) taxonomy in CJCS Instruction 5123.01 will be the common joint enterprise framework for CPM. Organizations may manage a set of portfolios that best fits their organizational needs, but all portfolios must logically map to the JCA taxonomy to facilitate fully informed cross-domain portfolio assessments.

c. Critical joint warfighting areas that span the portfolios of the Principal Staff Assistants (PSAs) assigned responsibilities in this issuance will be closely integrated to achieve joint objectives. Any issue that cannot be resolved at the PSA or equivalent level will be elevated, as appropriate, to the Deputy Secretary of Defense's Management Action Group (DMAG) or a relevant DoD senior governance forum for adjudication.

d. CPM will frame DoD-level capability decisions in a mission context to ensure delivery of integrated and innovative risk-informed solutions to meet strategic objectives.

SECTION 2: RESPONSIBILITIES

2.1. PSAS.

The PSAs (as defined in the Glossary) establish or identify portfolio governance for each enterprise-level capability portfolio in their area of responsibility in accordance with Paragraph 1.2.c.

2.2. UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT (USD(A&S)).

In addition to the responsibilities in Paragraph 2.1., the USD(A&S):

a. Provides CPM oversight for activities within USD(A&S)'s purview in accordance with Section 133b of Title 10, U.S.C. and DoDD 5135.02.

b. Conducts and chairs integrated acquisition portfolio reviews (IAPRs) to identify and assess interdependencies and risks throughout the acquisition life cycle to strengthen synchronization of warfighting concepts, technologies, requirements, program execution, and end-to-end mission performance to meet strategic objectives. In coordination with CJCS synchronizes CPM reviews (CPMRs) and IAPRs.

c. Develops and maintains enterprise acquisition portfolio roadmaps in coordination with the Military Services, Defense agencies, cooperative programs with allies and partners, and other PSAs as appropriate. Roadmaps identify industrial capability and capacity, and supply-chain health across portfolios.

d. In coordination with the Under Secretary of Defense for Research and Engineering (USD(R&E)), incorporates MIM principles within CPM. MIM:

(1) Provides common, engineered, mission-based technology and concept inputs that are aligned to strategy to the requirements process and concept assessment.

(2) Guides prototypes, provides design options and alternatives or trades, and informs program and portfolio investment decisions, including acquisition and intellectual property strategies.

e. Uses threat assessments from the Under Secretary of Defense for Intelligence and Security (USD(I&S)) to inform CPM.

f. Participates in functional capabilities boards (FCBs), technology modernization transition reviews (TMTRs), program and budget review (PBR), the AWG Community of Interest, and CPMRs to ensure that IAPRs use capability portfolio gaps and requirements, technology forecasts, DoD-wide analytic products, and current budgets as inputs to IAPRs.

g. Identifies, assesses, and addresses acquisition, sustainment, and industrial base interdependencies, risks, opportunities, and gaps across portfolios, including synchronizing cost, schedule, and performance forecasts. Provides inputs to PBR based on CPM acquisition and industrial base roadmap-identified gaps, using results from MIM activities.

h. In coordination with the Under Secretary of Defense (Comptroller)/Chief Financial Officer, Department of Defense (USD(C)/CFO), Chief Digital and Artificial Intelligence Officer (CDAO), and USD(R&E), develops and maintains CPM metric visualizations and tools, leveraging data automation, and digital engineering pursuant to the DoD Digital Engineering Strategy to the maximum extent possible.

i. Coordinates with the USD(R&E) to identify emerging technologies and capabilities that should be assessed for transition to programs of record within relevant acquisition portfolios, and coordinates with the Under Secretary of Defense for Policy, Defense Technology Security Administration to evaluate export control status and identify related protection gaps that may exist.

j. Resolves acquisition-related CPM issues where possible and refers issues that cannot be resolved to the DMAG or another relevant DoD senior governance framework forum.

k. Coordinates with the USD(R&E), USD(C)/CFO, USD(I&S), DoD Chief Information Officer (DoD CIO), the AWG co-leads as designated in Paragraph 2.13., and Secretaries of the Military Departments to develop, document, and manage authoritative data, data models, and data rights to support CPM. Ensures transparency, availability, and applicability of data, data models, and visualization of data.

l. Provides insights on competition, acquisition, sustainment, industrial policy, and the intellectual property aspects of modular open-systems approaches for programs (e.g., as informed by independent technical risk assessments) to IAPRs.

m. In coordination with the DoD CIO, assesses cybersecurity and cyber defense risks to missions within each portfolio to:

(1) Support the National Security Agency's DoD Strategic Cybersecurity Program cybersecurity evaluations of priority defense missions.

(2) Reduce and mitigate mission risk.

2.3. USD(R&E).

In addition to the responsibilities in Paragraph 2.1., the USD(R&E):

a. Provides CPM oversight for activities within USD(R&E)'s purview in accordance with Section 133a of Title 10, U.S.C. and DoDD 5137.02.

b. Leads execution of MIM and provides guidance on mission engineering activities, pursuant to the Mission Engineering Guide. Develops mission threads and identifies capability assessment criteria to enable portfolio management.

(1) Coordinates with the Joint Staff and Military Departments to leverage capability roadmaps to develop and maintain MIM-derived standard set of reference mission threads to be used to support IAPRs, CPMRs, TMTRs, and PBRs.

(2) Oversees and performs mission engineering analysis to supplement and integrate DoD Component MIM analysis as mission-based inputs to IAPRs, CPMRs, TMTRs, and the annual PBR.

(3) Establishes and maintains for the DoD the governance framework, data, and criteria for integrating the roadmaps and MIM analyses into a cohesive set of mission-based inputs.

(4) Develops policy, guidance, and best practices for MIM, Service mission threads, joint mission threads, and associated tools.

(5) Establishes and maintains infrastructure, tools, and integrated technical data in a unified repository for DoD Components to share MIM products and information.

(6) Coordinates with the USD(A&S), USD(C)/CFO, USD(I&S), DoD CIO, the AWG co-leads, and Secretaries of the Military Departments to develop, document, and manage authoritative data, data models, and data rights to support CPM. Provide policy and guidance for executing the DoD Engineering Strategy to ensure transparency, availability, and applicability of data, data models, data tools, and visualization of data.

(7) Provides reference mission threads to the DoD Components to conduct Component MIM activities to support relevant CPMRs, TMTRs, and IAPRs.

c. Develops and maintains integrated technology modernization transition roadmaps. Roadmaps include cooperative programs with allies and partners.

d. Conducts and chairs TMTRs to review roadmaps for technology development, prototyping, and experiments and makes recommendations. TMTRs are structured to:

(1) Assess risk and interdependencies and synchronize science and technology, technology modernization, prototyping and experimentation with transition planning aligned to warfighting concepts, requirements, program lifecycle needs, and end-to-end mission performance to meet strategic objectives.

(2) Integrate with, and inform, portfolio reviews of the Joint Staff, Office of the USD(A&S), and Cost Assessment and Program Evaluation (CAPE).

(3) Provide the USD(R&E)'s science and technology inputs to CAPE to support the annual PBR.

e. In coordination with the USD(I&S), ensures that current threat assessments and threat roadmaps inform MIM processes and TMTRs.

f. Participates in Joint Staff-led FCBs and CPMRs, IAPRs, and PBR to ensure that TMTRs use appropriate JCAs, capability gaps, requirements, acquisition programs, and budget inputs. Consults on the development of acquisition, capability, industrial base, and budget roadmaps to identify potential synergy, interdependencies, and transition points.

g. In coordination with relevant DoD Components, assesses and prioritizes technologies that might be relevant to mitigating capability gaps. Assesses the capacity of the defense industrial base to mature and produce the desired technologies. Develops inputs for PBRs based on CPM roadmap-identified gaps using results from MIM activities.

h. Coordinates with the USD(A&S) to identify emerging technologies and capabilities that should be assessed for transition to programs of record within relevant acquisition portfolios, and coordinates with the Defense Technology Security Administration to evaluate export control status and identify related protection gaps that may exist.

i. In coordination with the USD(C)/CFO and the USD(A&S), develops and maintains CPM and MIM metric visualizations and tools, leveraging ongoing work in digital modernization of analytical and decision support processes to enable portfolio management of DoD acquisition programs.

j. In coordination with the USD(A&S) and CDAO, provides policy and guidance for execution of the DoD Digital Engineering Strategy to leverage data, models, and tools in digital engineering ecosystems to support CPM metrics.

k. Provides insights to IAPRs on cybersecurity and cyber defense risk, technical risk, engineering, developmental testing, technology readiness, manufacturing maturity and risk, and modular open-systems approach for programs (e.g., as informed by independent technical risk assessments).

l. Resolves technology-related CPM issues where possible and refers issues that cannot be resolved to the DMAG or other relevant DoD senior governance framework forum.

2.4. UNDER SECRETARY OF DEFENSE FOR POLICY (USD(P)).

In addition to the responsibilities in Paragraphs 2.1. and 2.13., the USD(P):

a. Provides CPM oversight for activities within USD(P)'s purview in accordance with Section 134 of Title 10, U.S.C. and DoDD 5111.01.

b. Advises PSAs CPM goals, priorities, and objectives through the Defense Planning Guidance.

c. Provides relevant PSAs national defense strategy (NDS) and scenario insights to inform the CPMR, TMTR, and IAPR processes.

d. Supports the CPM process and resolves policy-related CPM issues where possible in accordance with Paragraph 1.2.c.

e. Evaluates export control status and identifies related protection gaps that may exist for emerging technologies and capabilities assessed by USD(R&E) and USD(A&S) for transition to programs of record.

2.5. USD(C)/CFO.

In addition to the responsibilities in Paragraph 2.1., the USD(C)/CFO:

a. Through automated tools, makes available program budget data that can be organized and aligned to capability portfolios in the IAPRs. These analytical, visualization, and decision support tools enable portfolio management of DoD acquisition programs.

b. Coordinates with the USD(A&S), USD(R&E), USD(I&S), DoD CIO, the AWG co-leads, and Secretaries of the Military Departments to develop, document, and manage authoritative data, data models, and data rights to support CPM. Ensures transparency, availability, and applicability of data, data models, and visualization of data.

c. Participates in FCBs, CPMRs, IAPRs, and TMTRs.

d. Supports CPM processes and resolves budget-related CPM issues where possible in accordance with Paragraph 1.2.c.

2.6. USD(I&S).

In addition to the responsibilities in Paragraph 2.1., the USD(I&S):

a. Advises PSAs on intelligence and threat data to ensure transparency, availability, and applicability of data, data models, and visualization of data used in CPM.

b. Participates in CPMRs, TMTRs, and IAPRs and provides intelligence, threat, and security insights to inform these CPM processes.

2.7. DIRECTOR, CAPE (DCAPE).

In addition to the responsibilities in Paragraphs 2.1. and 2.13., the DCAPE:

a. Serves as the principal advisor to the Secretary of Defense and other senior officials in the DoD for independent cost assessment, program evaluation, and analysis.

(1) Co-leads, with the USD(C)/CFO, the annual PBR.

(2) Conducts strategic portfolio reviews of major and cross-cutting capability portfolios as designated annually by the DepSecDef.

(3) Provides acquisition support on matters relating to cost analysis and analysis of alternatives for Major Defense Acquisition Programs.

b. Participates in FCBs, CPMRs, IAPRs, and TMTRs.

c. Incorporates, as appropriate, the results of CPMRs and IAPRs, and other related analytic products, into analytic assessments to develop investment alternatives as part of PBR.

2.8. DIRECTOR OF OPERATIONAL TEST AND EVALUATION (DOT&E).

In addition to the responsibilities in Paragraph 2.1., the DOT&E:

a. Provides CPM oversight for activities within DOT&E's purview in accordance with DoDD 5141.02.

b. Participates in FCBs, CPMRs, IAPRs, and TMTRs.

c. Coordinates with the USD(R&E), USD(A&S), USD(C)/CFO, USD(I&S), DoD CIO, and CDAO to develop, document, and manage authoritative operational effectiveness, suitability, survivability and lethality data, data models, and data rights to support CPM.

2.9. DOD CIO.

In addition to the responsibilities in Paragraph 2.1., the DoD CIO:

a. Provides CPM oversight for activities within the DoD CIO's purview in accordance with Sections 142, 2222, and 2223 of Title 10, U.S.C. and DoDD 5144.02.

b. Advises PSAs on information technology (IT) and cybersecurity-related matters in support of acquisition, science and technology, industrial, and threat roadmap development for identified portfolio areas.

c. Participates in appropriate CPM forums to ensure that enabling IT and cybersecurity capabilities align with DoD IT strategies, policies, and investment planning and integrate across JCAs accordingly.

d. Develops capability programming that directs DoD Component resourcing to support DoD priorities and associated functional strategies for:

(1) Cybersecurity.

(2) Software modernization.

(3) Command, control, and communications.

(4) IT portfolio management.

(5) Information management.

e. Provides oversight and governance of IT portfolio management in accordance with DoD Instruction 8115.02, and ensures consistent implementation of CPM within the IT portfolio management mission areas. Develops inputs for PBRs based on prioritized capability gaps in identified portfolio areas under DoD CIO purview.

f. Provides IT and cyber data to PSAs for use in CPM metric visualization tools. Advises on approaches to leverage machine learning and artificial intelligence, as well as data environments and integration mechanisms, to better enable CPM metric visualization tools and analysis.

g. Coordinates with the USD(A&S), USD(R&E), USD(C)/CFO, USD(I&S), the AWG co-leads, and Secretaries of the Military Departments to develop, document, and manage authoritative data, data models, and data rights to support CPM. Ensures transparency, availability, and applicability of data, data models, and visualization of data.

2.10. CDAO.

In addition to the responsibilities in Paragraphs 2.1. and 2.13., the CDAO:

a. Advises PSAs on data and analytics used in CPM.

b. Participates in appropriate CPM forums to ensure that enabling data and analytics align with DoD data and analytics strategies, policies, and investment planning and integrate across JCAs accordingly.

c. Coordinates with the USD(A&S), USD(R&E), USD(C)/CFO, USD(I&S), DoD CIO, Secretaries of the Military Departments, and other AWG co-leads to develop, document, and manage authoritative data, including the standardization of data format, sharing of data assets, and publication of data assets, data models, and data rights to support CPM. Ensures transparency, availability, and applicability of data, data models, and visualization of data.

2.11. SECRETARIES OF THE MILITARY DEPARTMENTS.

The Secretaries of the Military Departments:

a. Provide CPM oversight for activities within their purview in accordance with DoDD 5100.01.

b. Develop mission threads and associated acquisition and science and technology modernization in roadmaps in their areas of responsibility.

c. Perform MIM activities to analyze Service-specific missions, identify capability gaps and issues, and determine potential solution options to mitigate risk and close gaps. Identify opportunities to mitigate capability gaps and recommend options within relevant CPMRs, TMTRs and IAPRs.

d. Provide input for OSD acquisition, science and technology, threat, and industrial base roadmaps in identified portfolio areas in their areas of responsibility.

e. Provide input for developing CPM threat roadmaps.

f. Participate in FCBs and MIM forums focused on aligning CPM roadmaps with joint mission threads.

g. Provide input for developing joint mission threads informed by mission engineering analysis results.

h. Address capability gaps, as appropriate, through the Service programming and planning processes and Combatant Command-integrated priority list process.

i. Develop inputs for PBRs, as appropriate, based on CPM acquisition, and science and technology roadmap-identified gaps.

j. Provide data needed for IAPRs, TMTRs, CPMRs, and other CPM metric visualizations and roadmaps.

k. Coordinate with the USD(R&E), USD(A&S), USD(C)/CFO, USD(I&S), DoD CIO, the AWG co-leads, and CDAO to develop, document, and manage authoritative data, data models, and data rights to support CPM. Ensures transparency, availability, and applicability of data, data models, and visualization of data.

l. Provide the USD(C)/CFO and the DCAPE with a briefing and narrative to accompany the annual program objective memorandum identifying key alignment areas with the NDS and relevant CPMRs, TMTRs, and IAPRs.

2.12. CJCS.

In addition to the responsibilities in Paragraph 2.13., the CJCS:

a. Maintains JCA taxonomy for use as the common joint enterprise framework for CPM.

b. Schedules and chairs CPMRs. In accordance with CJCSI 5123.01, The Joint Requirements Oversight Council (JROC) and its subordinate boards manage and prioritize capability requirements within and across capability portfolios of the joint force. The CJCS can use prioritized capability requirements to inform other assessments and synchronize them with other portfolio reviews. In coordination with the USD(A&S), synchronizes CPMRs, TMTRs, and IAPRs.

c. Tasks the FCBs to develop and distribute key metrics required for CPM and leads reviews to compare CPM roadmaps with joint mission threads to identify gaps and issues.

d. Consults on and informs the development of acquisition, technology, industrial policy, and threat roadmaps.

e. Throughout the CPMR process, informs key DoD decision-making processes, including the DMAG, IAPRs, Defense Acquisition System, and Operations Deputies forums.

f. Ensures that each FCB delivers at least an annual CPMR to report key findings and recommendations related to priority capability gap redundancies, tradeoffs, opportunities, and impacts of recent budgetary decisions in accordance with JROC Memorandum 054-20.

g. Incorporates threat assessments from the intelligence community to inform joint-force capability requirements.

h. Resolves requirements-related CPM issues where possible in accordance with Paragraph 1.2.c.

i. Develops and manages a process for senior warfighting forum participation in capability portfolio management that includes developing and refining capability attributes to be used in shaping requirements.

2.13. DCAPE, USD(P), CJCS, AND CDAO.

The DCAPE, USD(P), CJCS, and CDAO co-lead the AWG to set guidance and standards for DoD strategic analysis. In that capacity, they coordinate with the USD(A&S), USD(R&E), USD(C)/CFO, USD(I&S), DoD CIO, and Secretaries of the Military Departments to ensure that any data set created or used by the analytic community CPM conforms to the overarching data standards set by the CDAO – including any analytic community-produced data set used for CPM.

SECTION 3: PORTFOLIO MANAGEMENT

3.1. OVERVIEW AND MOTIVATION.

a. The objective of CPM is to align the investments, requirements, interoperability, designs, and acquisitions of related capabilities across the DoD via enterprise portfolios to optimize operational mission capabilities across operating domains. This is done through robust analytic methods (in accordance with AWG principles and standards for strategic analysis), processes, organizational alignments, training, and tools to strengthen existing warfighting capabilities, realize new warfighting benefits, and streamline decision making. CPM will ensure that senior leadership makes informed critical joint decisions, incentivizes program managers, aligns funding across program elements, and realizes the increased warfighting benefits of enterprise integrated capability portfolio maturation across the short (0-2 years), mid (3-5 years), and long (6-20 years) terms.

b. CPM is a disciplined and integrated approach to prioritize requirements and allocate resources. This approach requires DoD to view its investments and divestments from a DoD level as contributing to the collective whole by integrating the outcomes from the respective portfolio management processes (e.g., CPMR, IAPR, TMTR, PBR) within each of the requirements, acquisition, and budgeting processes in accordance with Government Accountability Office-07-388 and Government Accountability Office-15-466. Portfolio management is more than major CPMRs, IAPRs, TMTRs, and PBRs, but is a continuum of management throughout the year. Portfolio reviews conducted at various levels across the DoD are the vehicles to:

(1) Ensure investments and acquisitions are aligned to strategic priorities and mission outcomes.

(2) Identify and prioritize capability gaps for potential DoD investment.

(3) Identify and prioritize urgent or emergent needs and manage opportunity costs.

(4) Identify and eliminate unwarranted duplication.

(5) Identify and align inter and intra portfolio:

(a) Warfighting dependencies.

(b) Technical and programmatic dependencies.

(c) Programming and budgeting dependencies.

(6) Identify and capitalize on the DoD's sunk investment by salvaging and reusing technology.

(7) Shape science and technology research for future portfolio capabilities.

(8) Monitor programs' health and timing to determine whether changes to the portfolio are warranted to manage investment risks.

(9) Identify acquisition and sustainment risks due to industrial base health, vulnerabilities, and opportunities.

(10) Recommend whether an individual technology or system should:

(a) Continue development as is;

(b) Stop development of duplicative efforts; or

(c) Adjust capability to address new issues or inject new technology.

(11) Determine whether investments are affordable to balance mission risks versus affordability risks.

c. These portfolio review outputs assist the DoD to integrate, synchronize, and coordinate capability development across requirements generation, programming and budgeting, and research and acquisition management.

3.2. STRUCTURE.

Processes for formalizing the establishment of capability portfolio managers, prioritizing lists of portfolios and scheduling portfolio reviews, and integrating the reviews within higher-level governance (i.e., DMAG) will be defined in CPM process direction. This paragraph is intended to provide a general structure until supporting guidance is issued by PSAs.

a. CPM seeks to synthesize and provide structure to the DoD's primary portfolio review processes that feed the DMAG to provide recommendations to the DepSecDef. The primary feeds are existing portfolio forums, including, but not limited to, the Nuclear Weapons Council, Missile Defense Executive Board, IAPRs, TMTRs, CPMRs, and the annual PBR process.

b. The DMAG is the lead governance forum charged with integrating, synchronizing, and coordinating portfolio content to ensure alignment to strategic priorities and capability demand. To support the DMAG and other senior decision-making forums, and reduce the likelihood of conflicting recommendations, these supporting portfolio processes must be based on the same data, aligned in methodology, synchronized in time, and driving toward common objectives in accordance with the NDS.

(1) CPM enables enterprise-level governance. The DepSecDef or a PSA may perform CPM within an existing supporting tier governance forum or establish a new CPM-supporting tier governance forum in accordance with DoDD 5105.79.

(2) Except in the case of existing portfolios otherwise established within the senior governance framework, PSAs will manage portfolios in accordance with Paragraph 1.2.c.

(3) A PSA may serve as, or establish, a capability portfolio manager.

3.3. PROCESS.

a. CPM is focused on meeting the objectives defined in the NDS and its supporting plans. These strategic and operational concepts guide how forces operate, warfighter demand signals, and the acquisition and technology development responses to that demand. These demands and responses are balanced annually with fiscal constraints. Policy drives mission to inform requirements and programs. Development and acquisition respond to these requirements, balanced against annual budgets.

b. CPMRs and IAPRs analyze impacts and changes to critical portfolios. Longer-horizon strategic reviews and long-range threat, science, and technology vectors will also inform CPMRs, TMTRs, and IAPRs. CPMRs, TMTRs, and IAPRs should be closely linked and, where appropriate, CPMRs will lead IAPRs to better define new demand signals.

c. The subsequent IAPR will consider acquisition portfolio risks and opportunities associated with these new demand signals. The subsequent TMTRs will consider technology modernization portfolio risks and opportunities associated with these new demand signals and acquisition portfolio needs. The outputs of these reviews will inform PSAs on areas within their respective responsibility that may require change. If a PSA cannot implement a change alone, or where there is an enterprise-level impact to the portfolio, the PSA will recommend issues to be referred to the appropriate governance forum. Capability portfolio managers will:

(1) Ensure that CPM is data driven and performed by an integrated set of mission-centric assessments and that reviews and decision processes are based on MIM. At the enterprise level, MIM will:

(a) Focus on joint warfighting missions using the JCA taxonomy.

(b) Provide standardized reference mission sets aligned to strategic objectives.

(c) Provide a mission engineering approach to design missions and assess the mission efficacy of systems and systems of systems.

(d) Support the governance framework with data and criteria for integrating and providing mission-based inputs for CPM assessments and decisions.

(2) Conduct strategic and program assessments using the results of CPMRs, TMTRs, IAPRs, and other related analytical products, to:

(a) Participate in PBR issue teams and shape options for strategic decisions by senior leaders.

(b) Develop investment priorities for input into PBR.

(c) Identify analytic gaps for input into the AWG.

(3) Identify critical issues for resolution at senior governance forums.

3.4. TOOLS.

CPM will be enabled by the following:

a. Roadmaps across a range of domains (e.g., acquisition, research, industrial, and threat) are critical tools in describing and synchronizing elements of a capability portfolio over time.

b. The Advana platform is the enterprise authoritative data management and analytics platform in accordance with the May 5, 2021 DepSecDef memorandum. It should be used, as appropriate, for CPM. Pre-decisional program or budget data may be sourced from other platforms.

c. Digital engineering in accordance with the DoD Digital Engineering Strategy. Digital engineering is an integrated digital approach using authoritative sources of system data and models as a continuum throughout a system's development and life. Digital engineering updates traditional systems engineering practices to take advantage of computational technology, modeling, analytics, and data sciences.

d. Mission engineering in accordance with the Mission Engineering Guide. Mission engineering is an interdisciplinary approach and process encompassing the entire technical effort to analyze, design, and integrate current and emerging operational needs and capabilities to achieve desired mission outcomes.

GLOSSARY

G.1. ACRONYMS.

ACRONYM	MEANING
AWG	Analysis Working Group
CAPE	Cost Assessment and Program Evaluation
CDAO	Chief Digital and Artificial Intelligence Officer
CJCS	Chairman of the Joint Chiefs of Staff
CPM	capability portfolio management
CPMR	capability portfolio management review
DepSecDef	Deputy Secretary of Defense
DMAG	Deputy Secretary of Defense's Management Action Group
DoD CIO	DoD Chief Information Officer
DoDD	DoD directive
DOT&E	Director of Operational Test and Evaluation
FCB	functional capabilities board
IAPR	integrated acquisition portfolio review
IT	information technology
JCA	joint capability area
JROC	Joint Requirements Oversight Council
MIM	mission integration management
NDS	national defense strategy
PBR	program and budget review
PSA	Principal Staff Assistant
TMTR	technology modernization transition review
U.S.C.	United States Code
USD(A&S)	Under Secretary of Defense for Acquisition and Sustainment
USD(C)/CFO	Under Secretary of Defense (Comptroller)/Chief Financial Officer, Department of Defense
USD(I&S)	Under Secretary of Defense for Intelligence and Security
USD(P)	Under Secretary of Defense for Policy
USD(R&E)	Under Secretary of Defense for Research and Engineering

G.2. DEFINITIONS.

Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.

TERM	DEFINITION
capability	The ability to complete a task or execute a course of action in the presence of specified conditions and at a defined level of performance.
capability gap	The inability to meet or exceed a capability requirement, resulting in an associated operational risk until closed or mitigated. The gap may be the result of no fielded capability, lack of proficiency or sufficiency in a fielded capability solution, or the need to replace a fielded capability solution to prevent a future gap.
capability portfolio	A collection of grouped capabilities as structured by JCAs and the associated doctrine, organization, training, materiel, leadership and education, personnel, and facilities programs.
capability roadmap	A document that characterizes the current state of capabilities, technologies, programs, and industry across the DoD and describes its evolution over time.
CPM	A disciplined management approach to align, prioritize, and optimize investments, requirements, risks, resources, research, and developments around a set of capabilities to achieve a set of mission objectives.
CPMR	A Joint Staff initiative to reorient the JROC process to incorporate top-down, concept-driven, and threat-informed capability development that informs DoD decision-making processes. The CPMR process will conduct continuous comprehensive reviews of portfolios to provide recommendations on capability management to the joint force.
FCB	Boards that are one level below the Joint Capabilities Board and advise the Joint Capabilities Board and JROC on issues within their capability requirements portfolio(s). Duties include providing capability requirements portfolio management, including review and assessment of capability requirements documents and adjudication of lower-level issues within their designated capability requirements portfolios before the Joint Capabilities Board's review.

TERM	DEFINITION
IAPR	An enterprise-level portfolio review, chartered by the May 27, 2021 DepSecDef memorandum, to provide a focused view of risks, interdependencies, and DoD-wide synchronization. IAPRs provide insight to senior leaders to shape enterprise-level decisions.
JCA	Collections of like DoD capabilities functionally grouped to support capability analysis, strategy development, investment decision making, CPM, and capabilities-based force development and operational planning.
joint mission thread	Operational and technical descriptions of the end-to-end set of activities and systems that accomplish the execution of joint missions. It is an approach based on JCAs, universal joint tasks, DoD guidance, doctrine, Service documentation, or other authoritative sources, that clarify requirements, provide operational and technical context, establish common standards, detail the interaction of systems and processes, and produce architectures.
MIM	The strategically driven, mission-focused framework to synchronize concepts, requirements, research and engineering, budget, and programs across the DoD to integrate cross-Service capabilities to deliver timely and accurate end-to-end mission effects.
mission	The task, together with the purpose, that clearly indicates the action to be taken and the reason thereof.
mission engineering	An interdisciplinary approach and process encompassing the entire technical effort to analyze, design, and integrate current and emerging operational needs and capabilities to achieve desired mission outcomes.
mission thread	A sequence of end-to-end activities and events presented as a series of steps to achieve a mission.
PSAs	The Under Secretaries of Defense, the General Counsel of the Department of Defense, the Inspector General of the Department of Defense, the Director of Operational Test and Evaluation, and those Assistant Secretaries of Defense, and Assistants to the Secretary of Defense and OSD Directors and equivalents, who report directly to the Secretary or the DepSecDef. For the purpose of this issuance, this term is limited to those PSAs assigned individual responsibilities in Section 2.

TERM	DEFINITION
roadmap	A document that characterizes the current state of threats, technologies, programs, and industry across the DoD and envisions the future employment of systems and the capabilities those systems will contribute. It is a living collaborative document that evolves to identify the barriers to realizing that future and outlines the proposed actions to overcome those barriers. Roadmaps are updated as progress is made toward overcoming barriers.
threat roadmap	Characterizes the current and projected state of the threat DoD must address in sizing and scoping current and future DoD capabilities.
TMTR	A review to identify and assess interdependencies and risks of research, technology modernization, prototypes, and experimentation to achieve end-to-end mission effects; strengthen synchronization and transition planning of technology development to warfighting concepts, requirements, and expeditious fielding; and inform consolidation of duplicate portfolio elements.

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[1] This memorandum is classified and is available upon request to authorized individuals.
[2] Available to authorized individuals at https//jrockmdsbpm.osd.smil.mil.
[3] Available to authorized individuals upon request to Office of the Under Secretary of Defense for Policy.