



RESEARCH
AND ENGINEERING

THE UNDER SECRETARY OF DEFENSE
3030 DEFENSE PENTAGON
WASHINGTON, DC 20301-3030

July 18, 2019

MEMORANDUM FOR CHIEF MANAGEMENT OFFICER OF THE DEPARTMENT OF
DEFENSE

SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
CHIEF OF THE NATIONAL GUARD BUREAU
GENERAL COUNSEL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, COST ASSESSMENT AND PROGRAM
EVALUATION
INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
CHIEF INFORMATION OFFICER OF THE DEPARTMENT OF
DEFENSE
ASSISTANT SECRETARY OF DEFENSE FOR LEGISLATIVE
AFFAIRS
ASSISTANT TO THE SECRETARY OF DEFENSE FOR PUBLIC
AFFAIRS
DIRECTOR, NET ASSESSMENT
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Directive-Type Memorandum (DTM) 19-007, "Developmental Test and
Evaluation Sufficiency Assessments"

References: See Attachment 1.

Purpose. In accordance with the authority in DoD Directive 5134.01; the July 13, 2018
Deputy Secretary of Defense Memorandum; DoD Instruction 5134.17; and guidance in
Sections 2366b and 2366c of Title 10, United States Code (U.S.C.), this DTM:

- Establishes policy, assigns responsibilities, and provides procedures to implement Sections 2366b(c)(1) and 2366c(a)(4) of Title 10, U.S.C., requiring the Milestone Decision Authority (MDA) of Major Defense Acquisition Programs (MDAPs) to include sufficiency assessments of developmental testing in Milestone (MS) B and MS C brief summary reports to Congress.
- This DTM is effective July 18, 2019; the policy will be included in the next revision of DoD Instruction 5000.02. The memoranda examples at Figure 1 and Figure 2 will be included in the next revision of the Defense Acquisition Guidebook. This DTM will expire effective July 18, 2020.

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

Definitions. See Glossary.

Policy.

- In accordance with Sections 2366b(c)(1) and 2366c(a)(4) of Title 10, U.S.C, the MDA for MDAPs will include an assessment of the sufficiency of Developmental Test and Evaluation (DT&E), to include the use of automated data analytics or modeling and simulation tools and methodologies, in MS B and MS C brief summary reports provided to the congressional defense committees and, in the case of intelligence or intelligence-related activities, provided to the congressional intelligence committees.
- For the MS B DT&E sufficiency assessment required by Section 2366b(c)(1) of Title 10, U.S.C, the assessment will address the sufficiency of:
 - The DT&E plans within the Test and Evaluation Master Plan.
 - The DT&E schedule, including a comparison to historic analogous systems.
 - The DT&E resources (facilities, personnel, test assets, data analytics tools, and modeling and simulation capabilities).
 - The mitigation of known risks of developmental test and production concurrency.
 - The developmental test criteria for entering the production phase.
- For the MS C DT&E sufficiency assessment required by Section 2366c(a)(4) of Title 10, U.S.C, the assessment will address:
 - The sufficiency of the DT&E completed.
 - The sufficiency of the plans and resources available for remaining DT&E.
 - The mitigation of risks identified during developmental testing to the production and deployment phase.
 - The readiness of the system to perform scheduled initial operational test and evaluation.

Responsibilities. See Attachment 2.

Procedures. See Attachment 3.

Releasability. Cleared for public release. Available on the Directives Division Website at <https://www.esd.whs.mil/DD/>.

A handwritten signature in blue ink, appearing to read "M.D. Griffin", with a horizontal line extending to the right.

Michael D. Griffin

Attachments:
As stated

ATTACHMENT 1

REFERENCES

- Defense Acquisition University, “Defense Acquisition Guidebook,” Chapter 1, “Program Management,” current edition
- Defense Acquisition University, “Defense Acquisition Guidebook,” Chapter 3, “Systems Engineering,” current edition
- Defense Acquisition University, “Defense Acquisition Guidebook,” Chapter 4, “Life Cycle Sustainment,” current edition
- Defense Acquisition University, “Defense Acquisition Guidebook,” Chapter 8, “Test and Evaluation,” current edition
- Department of Defense, “Cybersecurity Test and Evaluation Guidebook,” version 2.0, April 25, 2018
- Deputy Secretary of Defense Memorandum, “Establishment of the Office of the Under Secretary of Defense for Research and Engineering and the Office of the Under Secretary of Defense for Acquisition and Sustainment,” July 13, 2018
- DoD Directive 5134.01, “Under Secretary of Defense for Acquisition, Technology, and Logistics,” December 9, 2005, as amended
- DoD Instruction 5000.02, “Operation of the Defense Acquisition System,” January 7, 2015, as amended
- DoD Instruction 5134.17, “Deputy Assistant Secretary of Defense for Developmental Test and Evaluation (DASD(DT&E)),” October 25, 2011, as amended
- Office of the Deputy Assistant Secretary of Defense for Systems Engineering, “Department of Defense Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs,” January 2017
- Under Secretary of Defense for Research and Engineering Memorandum, “Policy Memorandum for Independent Technical Risk Assessments for Major Defense Acquisition Programs,” June 18, 2018
- United States Code, Title 10

ATTACHMENT 2
RESPONSIBILITIES

1. UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING (USD(R&E)). The USD(R&E):

- a. Provides the Under Secretary of Defense for Acquisition and Sustainment (USD(A&S)) with the MS B and MS C DT&E sufficiency assessments for those MDAPs for which the USD(A&S) is the MDA.
- b. Ensures the DoD Components follow the procedures in Attachment 3 of this DTM.
- c. In coordination with the USD(A&S), oversees the MS B and MS C DT&E sufficiency assessment reporting process.

2. DIRECTOR, DEVELOPMENTAL TEST AND EVALUATION (D(DT&E)). Under the authority, direction, and control of the USD(R&E), and in accordance with Sections 2366b(c)(1) and 2366c(a)(4) of Title 10, U.S.C., the D(DT&E):

- a. Has overall responsibility for conducting the MS B and MS C DT&E sufficiency assessments for MDAPs for which the USD(A&S) is the MDA.
- b. Reports the DT&E sufficiency assessment determinations to the USD(A&S) in accordance with the procedures in Attachment 3 of this DTM.

3. USD(A&S). The USD(A&S):

- a. Provides the congressional defense committees or intelligence committees (in the case of intelligence or intelligence-based activities) with MS B and MS C brief summary reports, required by Sections 2366b(c)(1) and 2366c(a)(4) of Title 10, U.S.C., for MDAPs for which the USD(A&S) is the MDA, not later than 15 days after granting MS B or MS C approval.

4. DOD COMPONENT HEADS. The DoD Component heads:

- a. Ensure the senior official within their Military Department, Defense Agency, or DoD Field Activity with responsibility for DT&E conducts the MS B and MS C DT&E sufficiency assessments for MDAPs for which the MDA is the Service or Component Acquisition Executive.
- b. Provide the congressional defense committees or intelligence committees (in the case of intelligence or intelligence-related activities) (with a copy provided to USD(A&S), USD(R&E), and the Director, Operational Test and Evaluation (DOT&E)) with MS B and MS C brief summary reports, required by Sections 2366b(c)(1) and 2366c(a)(4) of Title 10, U.S.C., including the DT&E sufficiency assessments for MDAPs for which the Service or Component Acquisition Executive is the MDA, not later than 15 days after granting MS B or MS C approval.

ATTACHMENT 3

PROCEDURES

1. WHEN THE USD(A&S) IS THE MDA:

a. The D(DTE&P) will conduct DT&E sufficiency assessments for MDAPs for which the USD(A&S) is the MDA.

b. For sufficiency assessments required by Section 2366b(c)(1) of Title 10, U.S.C., the D(DT&E) will report the MS B DT&E sufficiency assessment determinations to the USD(A&S), using the memorandum example depicted in Figure 1, prior to the program milestone decision, with a copy furnished to the DOT&E.

c. For sufficiency assessments required by Section 2366c(a)(4) of Title 10, U.S.C., the D(DT&E) will report the MS C DT&E sufficiency assessment determinations to the USD(A&S), using the memorandum example depicted in Figure 2, prior to the program milestone decision, with a copy furnished to the DOT&E.

2. WHEN THE SERVICE OR COMPONENT ACQUISITION EXECUTIVE IS THE MDA:

a. The senior official within the Military Department, Defense Agency, or DoD Field Activity with responsibility for developmental testing will conduct the DT&E sufficiency assessments for MDAPs for which the Service or Component Acquisition Executive is the MDA.

b. For sufficiency assessments required by Section 2366b(c)(1) of Title 10, U.S.C., the senior DT&E official for the Service or Component will report the MS B DT&E sufficiency assessment determinations to the Service or Component Acquisition Executive in a memorandum prior to the program milestone decision. A copy of the memorandum will be provided to the USD(R&E) and the DOT&E. The memorandum example depicted in Figure 1 is provided for guidance.

c. For sufficiency assessments required by Section 2366c(a)(4) of Title 10, U.S.C., the senior DT&E official for the Service or Component will report the MS C DT&E sufficiency assessment determinations to the Service or Component Acquisition Executive in a memorandum prior to the program milestone decision. A copy of the memorandum will be provided to the USD(R&E) and the DOT&E. The memorandum example depicted in Figure 2 is provided for guidance.

Figure 1. Milestone B DT&E Sufficiency Assessment Memorandum Example

[OFFICE LETTERHEAD]

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND
SUSTAINMENT [OR COMPONENT/SERVICE ACQUISITION
EXECUTIVE]

SUBJECT: Developmental Test and Evaluation Sufficiency Assessment for the *<name of program>* Program in Support of the Milestone B Brief Summary Report

This memorandum provides my assessment of the sufficiency of developmental test and evaluation (DT&E) plans for the *<name of program>* program as required by Section 2366b(c)(1)(G) of Title 10, U.S.C.

I have conducted a formal review of the program’s DT&E efforts and, on the basis of such review, assess that the DT&E is *<sufficient><not sufficient>* to support Milestone B and entry into the Engineering and Manufacturing Development (EMD) phase. During my review and assessment, I have determined the following:

DT&E Planning. The DT&E plans within the Test and Evaluation Master Plan are *<sufficient><not sufficient>* to support the EMD phase.

Basis for Assessment. *Provide a brief discussion supporting assessment of DT&E planning. Refer to Defense Acquisition Guidebook (DAG), Chapter 1, “Program Management,” and DAG, Chapter 8, “Test and Evaluation,” for determining sufficient DT&E planning. Summarize DT&E planning concerns with recommendations to resolve any issues. Use an attachment, if necessary.*

DT&E Schedule. The DT&E integrated master schedule for EMD is *<sufficient><not sufficient>*.

Basis for Assessment. *Provide a brief discussion supporting assessment of the DT&E schedule. Refer to DAG, Chapter 8, “Test and Evaluation,” for determining sufficient DT&E scheduling. If applicable, provide a comparison of this program’s schedule to historic analogous systems. Summarize DT&E schedule concerns with recommendations to resolve any issues. Use an attachment, if necessary.*

DT&E Resources. The planned DT&E resources (including facilities, personnel, test assets, automated data analytics tools, and modeling and simulation capabilities) supporting EMD are *<sufficient><not sufficient>*.

Figure 1. Milestone B DT&E Sufficiency Assessment Memorandum Example, Continued

Basis for Assessment. Provide a brief discussion supporting assessment of DT&E resources. Refer to DAG, Chapter 8, “Test and Evaluation,” for determining sufficient DT&E resources. Summarize DT&E resource planning concerns with recommendations to resolve any issues. Use an attachment, if necessary.

Risks of Developmental Test and Production Concurrency. The mitigation of known risks of developmental test and production concurrency is <sufficient><not sufficient>.

Basis for Assessment. Provide a brief discussion identifying DT&E risks and supporting DT&E risk mitigation. Refer to DAG, Chapter 8, “Test and Evaluation”; the “Department of Defense Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs”; and the June 18, 2018 USD(R&E) Memorandum for determining sufficient DT&E risk mitigation. Summarize DT&E risk concerns with recommendations to resolve any issues. Use an attachment, if necessary.

DT&E Entrance Criteria for Production Phase. The developmental test criteria for entering the production phase are <sufficient><not sufficient>.

Basis for Assessment. Provide a brief discussion supporting DT&E production phase entrance criteria. Refer to DAG Chapter 3, “Systems Engineering,” and DAG Chapter 8, “Test and Evaluation,” for determining sufficient DT&E production phase entrance criteria. Summarize DT&E entrance criteria concerns with recommendations to resolve any issues. Use an attachment, if necessary.

Additional Information (optional). Provide the MDA with any relevant information (e.g. Supply Chain Security) appropriate to this DT&E sufficiency assessment. Use an attachment, if necessary.

The point of contact for additional details and analysis supporting this DT&E sufficiency assessment is <Name, Email Address, and Phone Number>.

<Signature block of the DD(DTE&P)> or
<Signature block of senior official within the
Military Department, Defense Agency, or DoD
Field Activity with responsibility for DT&E >

cc:
USD(R&E) or DD(DTE&P) if Component signed
DOT&E

Figure 2. Milestone C DT&E Sufficiency Assessment Memorandum Example

[OFFICE LETTERHEAD]

MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND
SUSTAINMENT [OR COMPONENT/SERVICE ACQUISITION
EXECUTIVE]

SUBJECT: Developmental Test and Evaluation Sufficiency Assessment for the <name of program> Program in Support of the Milestone C Brief Summary Report

This memorandum provides my assessment of the sufficiency of developmental test and evaluation (DT&E) completed for the <name of program> program as required by Section 2366c(a)(4) of Title 10, U. S. C.

I have conducted a formal review of the program’s completed DT&E and assess on the basis of such review that the DT&E completed is <sufficient><not sufficient> to support Milestone C and entry into the Production and Deployment (P&D) phase. During my review and assessment, I have determined the following:

Completed DT&E. The evaluation of results from DT&E completed to date is <sufficient><not sufficient> to support entry into the P&D phase.

Basis for Assessment. Provide a brief discussion supporting assessment of completed DT&E. Refer to Defense Acquisition Guidebook (DAG), Chapter 8, “Test and Evaluation,” and the DoD Cybersecurity Test and Evaluation Guidebook for determining sufficient DT&E completion. Summarize DT&E completion concerns with recommendations to resolve any issues. Use an attachment, if necessary.

DT&E Remaining Plans and Resources. The plans and resources available for remaining DT&E are <sufficient><not sufficient> to support the P&D phase.

Basis for Assessment: Provide a brief discussion supporting assessment of remaining DT&E plans and resources. Refer to DAG, Chapter 4, “Life Cycle Sustainment,” and DAG, Chapter 8, “Test and Evaluation,” for determining sufficient DT&E planning and resources. Summarize DT&E remaining plans and resources concerns with recommendations to resolve any issues. Use an attachment, if necessary.

Risks to the P&D Phase Identified During DT&E. The mitigation of risks identified during DT&E to the P&D phase is <sufficient><not sufficient>.

Figure 2. Milestone C DT&E Sufficiency Assessment Memorandum Example, Continued

Basis for Assessment. Provide a brief discussion supporting DT&E risk mitigation. Refer to DAG, Chapter 8, “Test and Evaluation”; the “Department of Defense Risk, Issue, and Opportunity Management Guide for Defense Acquisition Programs”; and the June 18, 2018 USD(R&E) Memorandum for determining sufficient DT&E risk mitigation. Summarize DT&E risk concerns with recommendations to resolve any issues. Use an attachment, if necessary.

System Readiness for Initial Operational Test and Evaluation (IOT&E). The system is <ready/not ready> for scheduled IOT&E.

Basis for Assessment. Provide a brief discussion supporting system readiness for IOT&E assessment. Refer to DAG, Chapter 3, “Systems Engineering”; DAG Chapter 4, “Life Cycle Sustainment”; DAG, Chapter 8, “Test and Evaluation”; and the DoD Cybersecurity Test and Evaluation Guidebook for determining readiness for IOT&E. Summarize DT&E IOT&E readiness concerns with recommendations to resolve any issues. Use an attachment, if necessary.

Additional Information (optional). Provide the MDA with any relevant information (e.g. Supply Chain Security) appropriate to this DT&E sufficiency assessment. Use an attachment, if necessary.

The point of contact for additional details and analysis supporting this DT&E sufficiency assessment is <Name, Email Address, and Phone Number>.

<Signature block of the DD(DTE&P)> or
<Signature block of senior official within the
Military Department, Defense Agency, or DoD
Field Activity with responsibility for DT&E >

cc:
USD(R&E) or DD(DTE&P) if Component signed
DOT&E

GLOSSARY

PART I. ABBREVIATIONS AND ACRONYMS

DAG	Defense Acquisition Guidebook
DD(DTE&P)	Deputy Director, Developmental Test, Evaluation and Prototyping
DOT&E	Director, Operational Test and Evaluation
DT&E	Developmental Test and Evaluation
DTM	Directive-Type Memorandum
EMD	Engineering and Manufacturing Development
FY	fiscal year
IOT&E	Initial Operational Test and Evaluation
MDA	Milestone Decision Authority
MDAP	Major Defense Acquisition Program
MS	milestone
P&D	Production and Deployment
U.S.C.	United States Code
USD(A&S)	Under Secretary of Defense for Acquisition and Sustainment
USD(R&E)	Under Secretary of Defense for Research and Engineering

PART II. DEFINITIONS

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

MDAP. Defined in Section 2430 of Title 10, U.S.C.