



Air Force Life Cycle Management Center

Standard Process

For

*Designation of
Lead Developmental Test and Evaluation
Organization (LDTO)*

Process Owner: AFLCMC/AZT

Date: 19 January 2023

Record of Changes		
Version	Effective Date	Summary
1.0	5 Dec 2013	Standard process approved by S&P Board on 21 Nov 2013. This standard process supersedes process approved by AFLCMC/AQT (CTA-WPAFB) and posted as Process Guide T126, dated 19 Sep 2012.
2.0	10 Jun 2016	Updated to include AFMC/A3 8 Dec 2014 Interim Guidance Memorandum. Major changes: LDTO designation memorandum option removed IAW AFMC guidance and added introduction of new AFMC LDTO Designation Form 42, added a Change Management Plan and added note from AFMC/A3 that A&AS contractors cannot sign the Form 42.
3.0	18 Aug 2017	Updated to include AFI 99-103 changes for “Alternate-LDTO” guidance. Updated attachment 2, Business Rules with enhanced AFMC Form 42 coordination/completion instructions. Administratively approved by S&P Board in June 2017.
3.1	16 Aug 2018	Updated tools share-point links, added new training references, minor update to attachment 2 and various administrative fixes. Approved by S&P Board 16 Aug 2018.
4.0	15 Oct 2020	Updated to include AFI 99-103 with AFMC Supplement changes for LDTO approval authority, Alternate-LDTO guidance and deletion of LDTO “blanket” designations. Improved process flowchart and WBS. Updated references and attachments. Approved by S&P Board 15 Oct 2020.
4.1	19 Jan 2023	Updated to include regulatory changes including DODI5000.89_DAFI99-103 and its recently published AFMC Supplement. Updated reference materials and links. Admin changes throughout. Approved by SP&P Group on 19 January 2023.

LDTO Designation Standard Process

1.0 Description

- 1.1 The LDTO Designation Process implements Department of Defense (DOD) and Department of the Air Force (DAF) regulations by facilitating the selection of the best suited and available test organization that can plan and execute Developmental Test & Evaluation (DT&E) activities for a program or project. The Program Manager (PM) is responsible for ensuring an LDTO is selected and designated as soon as practicable after a program is initiated or the program office is established. The process is initiated by the program's Integrated Test Team (ITT) that nominates a recommended LDTO to the PM to begin approval coordination using the AFMC Lead Developmental Test Organization Worksheet. The process concludes when an LDTO (or Alternate LDTO) is approved by AFMC/A3.
 - 1.1.1 The Chief Developmental Tester (CDT), required for Major Defense Acquisition/Major Automated Information System Programs, or the Test Manager (TM) for other programs, guides the ITT in executing this process. If no CDT or TM is appointed, the PM or designee will need to complete the process. The PM may request support from the Directorate T&E Organizational Senior Functional (OSF) and the Center Test Authority (CTA) until a CDT or TM has been assigned/appointed.
- 1.2 **Applicability:** Acquisition or sustainment programs/projects that have a phase of Developmental Test and Evaluation (DT&E) require an LDTO that conducts/execute the DT&E and/or is responsible to oversee a group of organizations (including any contractor efforts) conducting DT&E for a program/project. Note: DT&E may include testing of commercial-off-the shelf and non-developmental items to validate the product or capability integrates into the intended environment and meets user requirements and suitability standards. See DODI5000.89_DAFI 99-103 for Acquisition Category (ACAT) or other Acquisition Pathway applicability (Section 4), LDTO responsibilities, and DT&E activities. For low risk ACAT III or BCAT III programs or projects that are not on the T&E oversight list, an Alternate LDTO option may be the best course of action for the PM. Foreign military sales (FMS) programs/projects should follow the applicable sections of DODI5000.89_DAFI 99-103 and DAFMAN 10-703.
- 1.3 **Administration:** After AFMC/A3F's approval, the completed AFMC LDTO Worksheet is returned to the Program Office (PO) and copied to the CTA. The PO will forward a copy of the signed worksheet to the LDTO and its Executing Test Organization (ETO). The PM will reference this LDTO decision in the program Acquisition Strategy and any Acquisition Strategy Panels along with the program's Test and Evaluation Master Plan (TEMP) or test strategy.

2.0 Purpose

- 2.1 **Proper selection:** Execution of this process will ensure that the DT&E organization with the most capable resources (including availability and cost considerations) is nominated and selected as the LDTO to support any given acquisition or sustainment

effort. Programs not on the Acquisition Master List will need an LDTO assigned to ensure test efficiency and safety for Government resources.

- 2.2 Single organization responsible for T&E execution: Despite the number of organizations participating in a given DT&E activities, normally only one will be designated as the LDTO. Some LDTO organizations (e.g., AFTC and AFLCMC CTA) will designate one or more ETOs to carry out the duties of the LDTO. The LDTO may designate a sub-organization, such as a Participating Test Organization (PTO), to conduct the test with LDTO oversight in alignment with the DAF M&S Strategy and M&S policy and instructions. The ETO/PTO(s) should be known at the time of designation and noted on the AFMC Lead Developmental Test Organization Worksheet.
- 2.3 Allows option for “Alternate LDTO”: Per DODI5000.89_DAFI99-103, if an ACAT III (or equivalent) program is “is by exception and only authorized for low risk” from a technical and safety perspective, the Alternate LDTO option may be considered. For example, an LDTO from the HQ AFMC A3 candidate list may not be available or qualified to meet specific program DT&E requirements, or unable to meet cost/schedule constraints. In this case the ITT should fully consider the risks and impacts of not using an approved LDTO to address the testing needs of the program and its user/customer. Any alternate organization designated in lieu of an LDTO must be able to perform the functions and responsibilities described in the DODI5000.89_DAFI 99-103, paragraph 2.20. Justification must be provided by the PM to HQ AFMC A3 that the Alternate LDTO option is best to meet cost, schedule, and performance thresholds. A trained and qualified TM must be appointed prior to nominating a PO as an Alternate LDTO. Use of a PTO should also be considered with the Alternate LDTO option (e.g., an AFTC organization performing as a PTO for specific aspects of the T&E strategy).
- 2.4 According to DODI5000.89_DAFI99-103 the PM will appoint a qualified Test Manager with a minimum of Level II 962 Defense Acquisition Workforce Improvement Act T&E acquisition-coded (T-code) position 963 certification to ACAT II, BCAT II, and below to include non-oversight programs. (T-1). The authorities to waive wing/unit level requirements in this publication are identified with a Tier (“T-45 0, T-1, T-2, T-3”) number following the compliance statement. See AFI 33-360, Publications and Forms 46 Management, for a description of the authorities associated with the Tier numbers. Submit requests for waivers 47 through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the requestor’s commander for non-tiered compliance items. Waivers to mandates involving the acquisition program execution chain are processed in accordance with the acquisition chain of authority as specified in AFI 63-101_20-101.

3.0 Entry/Exit Criteria

- 3.1 Entry Criteria: ITT nominates a selected LDTO or Alternate LDTO to the PM to begin approval coordination using the AFMC LDTO Worksheet.
- 3.2 Exit Criteria: AFMC/A3 signs AFMC LDTO Worksheet.

3.3 Inputs:

- 3.3.1 Concurrence from the Directorate T&E OSF;
- 3.3.2 Oversight by the program CDT or TM;
- 3.3.3 Concurrence from the PM;
- 3.3.4 Consultation with local CTA office;
- 3.3.5 Current AFMC/A3 approved LDTO list; and
- 3.3.6 Communication with and feedback from candidate LDTOs.

3.4 Outputs: AFMC/A3F-signed LDTO Worksheet returned to the PM.

4.0 Process Workflow and Activities

4.1 Suppliers, Inputs, Process, Outputs & Customers (SIPOC), **Table 1.**

Table 1. SIPOC

Supplier	Inputs	Process	Outputs	Customer
Integrated Test Team (ITT)	Early T&E Strategy discussions	Initiate selection of an LDTO in conjunction with TEMP/test strategy development	Selection Initiation	CDT, TM or PM
AFMC/A3, Candidate LDTOs	AFMC/A3 approved LDTO list, discussions with candidate LDTOs	Research and analyze potential LDTO capabilities and resource availability	Comparison of LDTO capabilities and resource availability	ITT, CDT/TM
ITT	Analysis of candidate LDTO capabilities and resource availability vs. program needs	Recommend LDTO candidate or Alternate LDTO option to the PM & PEO for selection coordination	LDTO Recommendation or Alternate LDTO Option via AFMC LDTO Worksheet	PM
ITT	LDTO/Alternate LDTO Option Recommendation	AFMC/A3 Review/Approve recommended LDTO or Alternate LDTO Option	Signed AFMC LDTO Worksheet	PM, PEO and LDTO

4.2 Process Flowchart. The process flowchart below, **Figure 1**, represents the LDTO Designation Process. The activities are further defined below and in Para 4.3,.

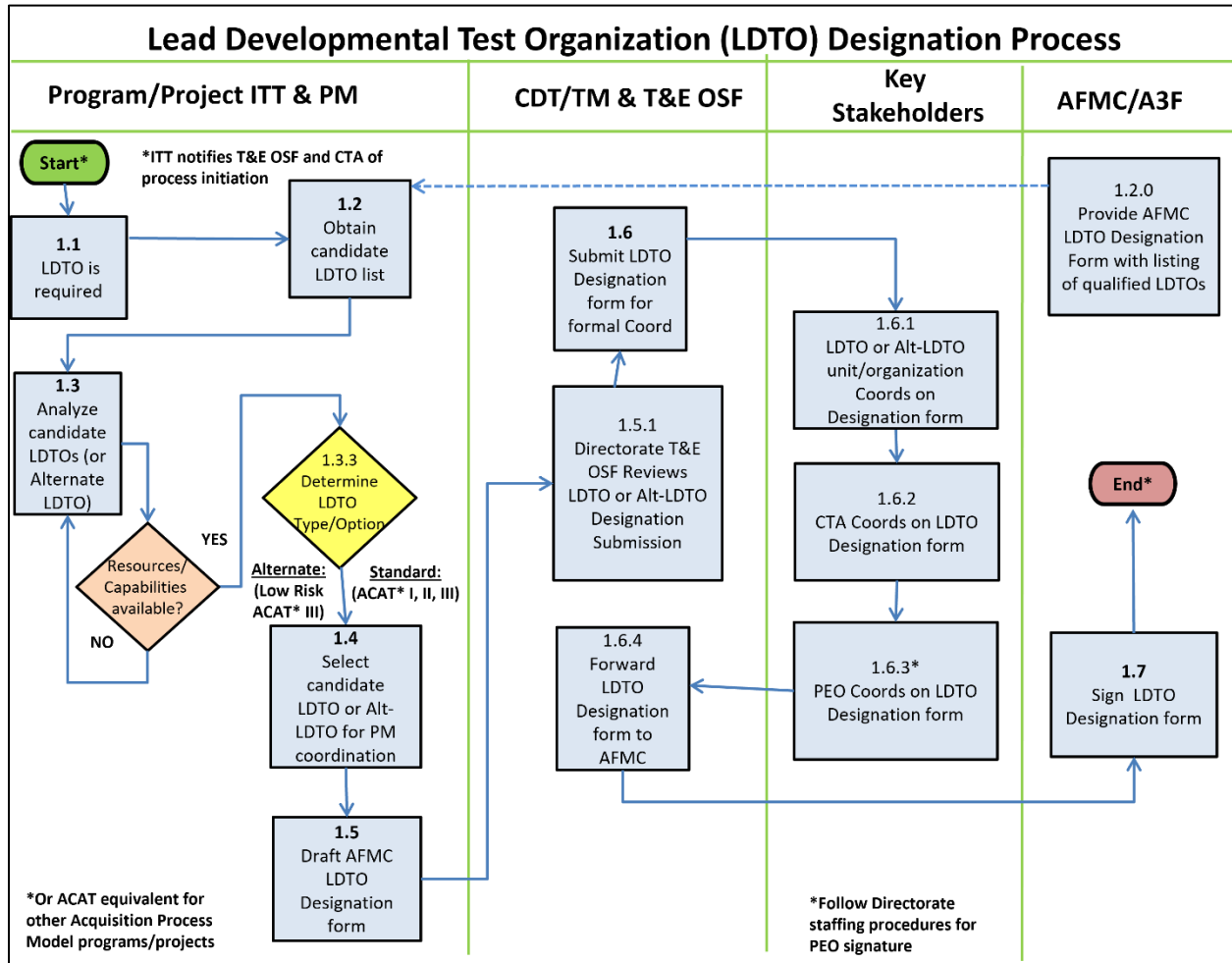


Figure 1. LDTO Designation Process Flowchart

- 4.2.1 The CDT/TM (or PM designee) initiates the process with the ITT when an agenda item is opened at an ITT meeting to discuss designation of an LDTO for the program. The CDT/TM (or PM) should notify the Directorate T&E OSF and CTA that the process has been initiated.
- 4.2.2 The AFMC LDTO Worksheet for LDTO designation may be obtained from the AFMC/A3F LDTO Workflow (afmc.a3f.ldtoworkflow@us.af.mil). AFMC/A3F also maintains the latest candidate listing of qualified LDTOs and their platform or system areas of expertise.
- 4.2.3 The ITT will contact and evaluate candidate LDTOs/ETOs and discuss with them the project/program's information (capabilities and technologies that are to

be developed) to determine if the candidates have the right DT&E skill sets and the human and capital resources to support project/program needs.

- 4.2.4 The ITT will analyze the candidate LDTO's/ETO's capabilities and resources and determine the "best fit" candidate for the project/program and appropriate ETO if applicable.
- 4.2.5 If an ACAT III program/project is determined to be "low risk," the ITT may recommend an Alternate LDTO Option if justified, to the PM. See **Attachment 2**, Business Rules paragraph 4.5 for additional information.
- 4.2.6 With the ITT's determination, the CDT/TM (or PM designee) will draft the AFMC LDTO Worksheet for the PM concurrence and coordination.
- 4.2.7 The AFMC LDTO Worksheet is also reviewed by the Directorate T&E OSF (as applicable) and coordinated thru the LDTO, CTA and PEO before forwarding to the AFMC/A3 for approval.

- 4.3 Work Breakdown Structure (WBS). **Attachment 1** provides a MS Excel version of the WBS with additional detail for all process activity steps and each activity box in **Figure 1** flowchart.

5.0 Process Measurement

5.1 Process Results

- 5.1.1 The overall LDTO designation process cycle time varies greatly based on the size and/or complexity of the program. Therefore the metric for this process will only measure the time it takes for an AFMC LDTO Worksheet to complete the staffing/coordination process; the start is defined as the date the CDT, TM or PM designee (If waiver is approved) signs the AFMC LDTO Worksheet and ends on the date that AFMC/A3 approves and signs it.
- 5.1.2 The measurement baseline for this metric is 45 business days. The desired goal is 30 calendar days or less.

5.2 Process Evaluation

- 5.2.1 AFMC/A3F will forward a copy of the approved worksheet to the originating PO and CTA no later than 5 business days after final signature. CTA will track worksheet coordination start and end dates.
- 5.2.2 The CTA will monitor metric data for trends and for any indications that the current measurement standard may require an efficiency change or adjustment.
- 5.2.3 Process data may be briefed to the S&P Board by exception if negative trends are present/noted. SMART metric attributes are available for this standard process.

6.0 Roles and Responsibilities

- 6.1 Process Owner: AFLCMC/AZT, CTA
 - 6.1.1 Maintains and coordinates any changes to this process including responsibility for leading efforts on process improvement.
 - 6.1.2 Secures approval for process changes via the Standards and Process Board.
 - 6.1.3 The CTA chief concurs (or non-concurs) on LDTO recommendations.
- 6.2 Program Executive Officers (PEOs). Assist the PM, CDT or TM and ITT as needed in identifying key government DT&E execution organizations as LDTO candidates.
 - 6.2.1 Concurs (or non-concurs) on LDTO designations to AFMC/A3.
- 6.3 Program Managers (PMs)
 - 6.3.1 Ensures LDTO or Alternate LDTO option is selected (as appropriate), as early as possible or following program MDD or project equivalent.
 - 6.3.2 Ensures the AFMC LDTO Worksheet is completed and forwarded to the selected LDTO for coordination before submission to the CTA and PEO.
- 6.4 T&E Organization Senior Functional (OSF). Executes all T&E functional policies, processes, and force development plans within their organizations. Reviews organization's T&E plans documentation to include LDTO or Alternate LDTO submissions.
- 6.5 Chief Developmental Testers (CDT)/Test Managers (TM). Chairs the ITT and submits the AFMC LDTO worksheet to the PM to begin coordination for approval.
- 6.6 Integrated Test Teams (ITT)
 - 6.6.1 Begin the LDTO consideration/designation process after program/project initiation or start.
 - 6.6.2 Communicate with candidate LDTOs and analyze their capabilities and resources to determine the test organization best-suited to accomplish the project's or program's DT&E activities/requirements.
 - 6.6.3 Recommend LDTO candidate or Alternate LDTO option to the PM.
- 6.7 Candidate LDTOs.
 - 6.7.1 Communicate with program or project ITTs to provide the test organizations capabilities and resource availability to plan and execute DT&E for the program/project.
 - 6.7.2 Selected LDTO Concurs (or non-concurs) on PM's recommendation due to LDTO capability.
- 6.8 HQ AFMC/A3.
 - 6.8.1 Maintain, update and provide access to AFMC listing of qualified LDTOs for CDT/TM, PM, ITT and CTA reference.
 - 6.8.2 Approves (or disapproves) LDTO selection after all stakeholders' coordination.

6.8.3 Maintains a workflow (see 4.2.2) for assistance with the AFMC LDTO Worksheet and listing of qualified LDTOs.

7.0 Tools/Resources

7.1 CTA Community Site:
<https://usaf.dps.mil/teams/21435/CTA/SitePages/Home.aspx>

8.0 Delivery Approach

8.1 Recommended Training Courses:

8.1.1 AFIT Course SYS 153 – *Early Tester Involvement*

8.1.2 AFIT Course SYS 154 – *Test Planning, Execution and Reporting*

8.1.3 AFIT Course SYS 253 – *Early Test and Evaluation Influence in Acquisition*

8.1.4 DAU Course TST 102 – *Fundamentals of Test and Evaluation*

8.1.5 CTA Focus Week classes & Test Manager orientation training

8.2 .

9.0 Definitions, Guiding Principles, Ground Rules, Assumptions and Acronyms. N/A

10.0 References to Law, Policy, Instructions or Guidance

10.1 DODI 5000.89 (Nov 2020)

10.2 DAFI 63-101 / 20-101 (June 2020 and Change 1, Nov 2021)

10.3 DODI5000.89_DAFI 99-103 (Dec 2021) and its AFMC Supplement (Oct 2022)



10.4 Air Force T&E Guidebook: <https://usaf.dps.mil/sites/haf-te/Pages/Guides-and-Templates.aspx>

10.5 OSD Test and Evaluation Enterprise Guidebook (Aug 2022)

10.6 AFMC Lead Developmental Test Organization Worksheet (contact HQ AFMC A3 via workflow email for current version)

10.7 DAFMAN 10-703 (2 Jun 2021) Electromagnetic Warfare Integrated Reprogramming

11.0 Attachments.

Attachment 1: MS Excel Version of WBS of LDTO Process	 A1 - WBS Rev2a.xlsx
Attachment 2: Business Rule Guidelines of LDTO Process	 A2-LDTO Business Rules Rev2.docx