Test Limitations - Guidance

Guidance

Ideally, the test and evaluation strategy would have no limitations that could degrade or prevent resolution of the critical operational issues (COIs) or formulation of conclusions concerning system effectiveness, suitability, or survivability. In those instances when test limitations cannot be avoided, the TEMP should enumerate them. For each limitation, the TEMP should explain the problem(s) in enough detail to describe specifically how the limitation will affect the evaluation and the conclusions that can be drawn from the test.

A program might have test limitations that affect DT, LFT&E, and/or OT. Each limitation should be addressed in the appropriate TEMP sections 3.2.6 DT Test Limitations, 3.4.4 OT Test Limitations, or 3.5.3 LFT&E Test Limitations, as appropriate. Cybersecurity test limitations should be addressed in the appropriate DT/OT Test Limitation section (if integrated with DT or OT), or in Appendix E, Cybersecurity.

Rarely should a TEMP that anticipates a critical limitation for planned test events be submitted to DOT&E for approval. The TEMP should explain plans, if any, to mitigate limitations.

Definition

Generally, test limitations are constraints that cause differences between the test environment and the expected operational environment (combat or peacetime, as appropriate), which in turn could cause the test results to differ from the results in the expected operational environment. A test might also have limitations if it is impossible to establish ground truth or evaluate results with certainty. The test might be limited in scope because there are inadequate resources to test in all of the relevant operational environments, e.g., extreme cold or hot weather. Other limitations might include altered procedures because of safety concerns, constrained test infrastructure, lack of threat surrogates, inadequate target realism, or the immaturity of the system or any subsystems.