

Third Party Testing Program Overview

June 18, 2015



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Transportation
Security
Administration



Third Party Testing (TPT) Program

Introduction

The Transportation Security Administration (TSA) TPT Program provides a standardized approach to testing Transportation Security Equipment (TSE) in response to procurement opportunities.

This approach will help streamline the acquisition process by requiring vendors to provide more mature products up-front as well as save cost and time required to test, fix, and re-test during Qualification Testing (QT) and Operational Testing (OT).

Key Benefits

- Savings in cost, time, and resources
 - More mature systems entering QT and OT result in a reduced cycle of test, fix, and re-test
- Transparency between government and vendors
 - Transparency leads to trust, reliability, consistency, and improves the quality of the Test and Evaluation (T&E) process



Cost-Benefit Analysis

From TSE that exhibited system deficiencies requiring TPT, the TSA selected three systems for a cost-benefit analysis. Each TSE had resulted in multiple rounds of retests, extending the T&E timeline and increasing cost.

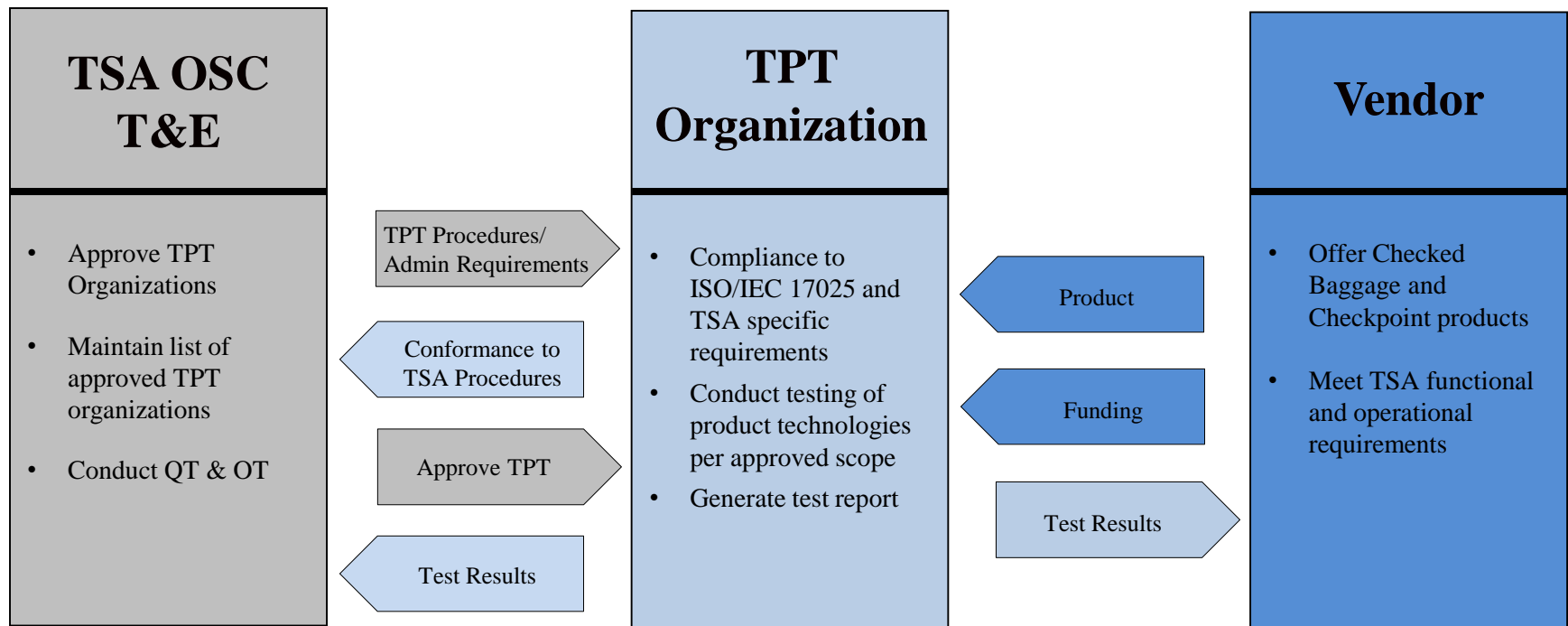
Test	Timeline	Cost
TSE 1	39 month delay between planned ARB and <i>actual</i> ARB	\$1.08M spent on retests
TSE 2	19 month delay between planned ARB and <i>actual</i> ARB	\$1.21M spent on retests
TSE 3	59 month delay between planned ARB and <i>projected</i> ARB	\$1.22M spent on retests

By addressing system deficiencies in TPT to avoid multiple rounds of retests, the TSA believes the T&E timeline can be significantly reduced.

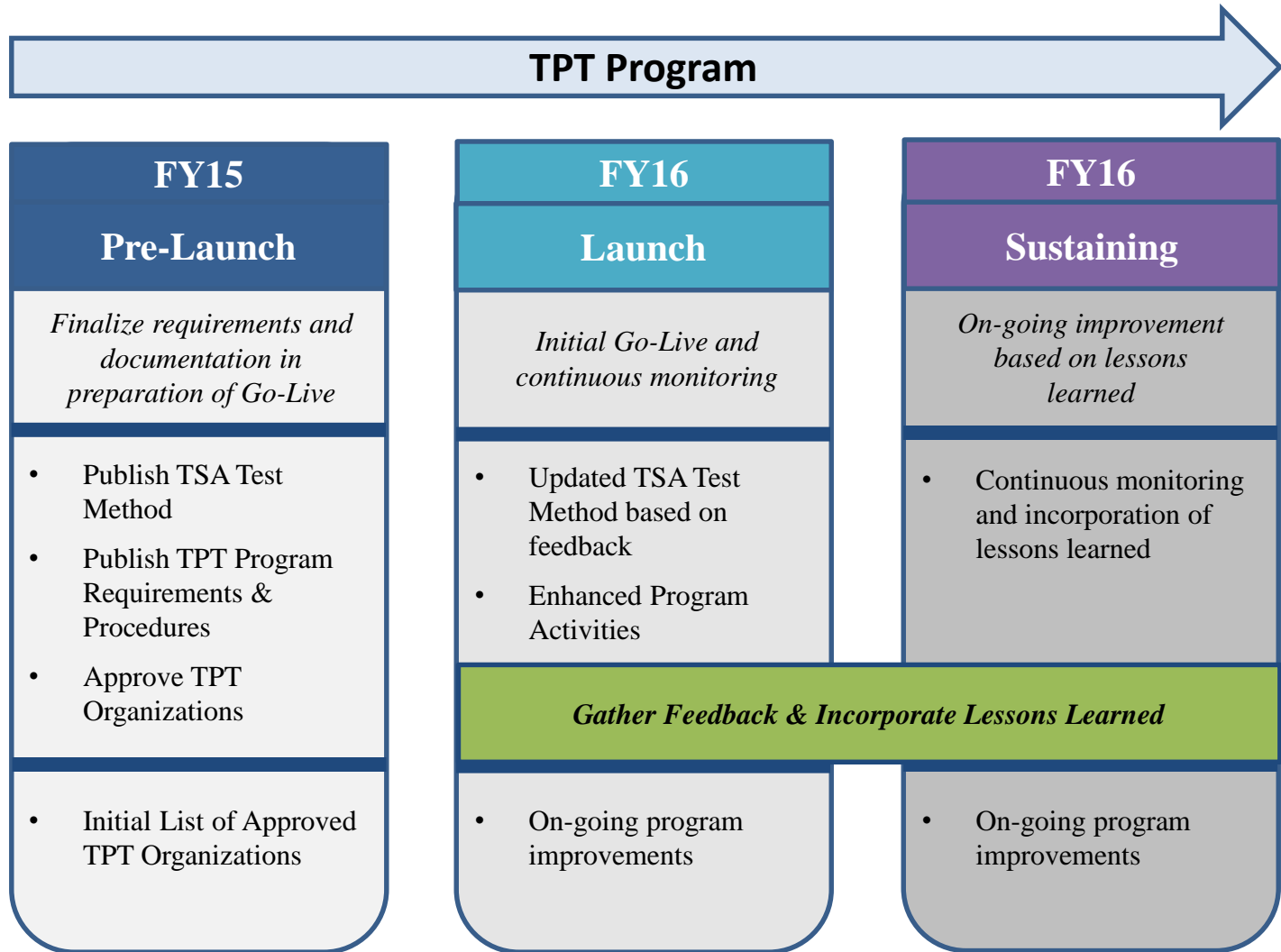


TPT Program: High Level View

With the TPT Program in place, the TSA will be able to approve TPT organizations that will then be available to independently test vendors' systems before they enter the formal T&E process.



TPT Program: Phases & Timeline



TPT Conformity Assessment Process

The TPT Program requires vendors to use Third Party Test Organizations (TPTs) to independently test the TSE meets TSA requirements.

Approval

Conformity assessment process approves TPTs based on:

- Independence and quality management in accordance with ISO/IEC 17025
- Technical competence of critical TSE operational areas per technology

Key Benefits

The benefits of leveraging the formal TPT approval process include:

- Consistency in testing resulting in more robust products
- Ensuring TPT independence from vendors
- Establishing an approved list of TPTs for vendors to use



TPT Approval Requirements

Organizations applying to be TSA approved TPTs must submit an application, as well as quality system documentation conformant to the requirements of ISO/IEC 17025 and TSA specific management and technical requirements.

Management Requirements	Technical Requirements
Organization	Personnel
Management System	Accommodations and Environmental Conditions
Document Control	Test Methods and Method Validation
Review of Requests, Tenders, Contracts	Equipment
Subcontracting	Measurement Traceability
Service to the Customer	Sampling
Complaints	Handling of Test Items
Improvement	Assuring Quality of Test Results
Corrective Action	Reporting the Results
Preventive Action	
Control of Records	
Internal Audits	
Management Review	



TPT Approval Process

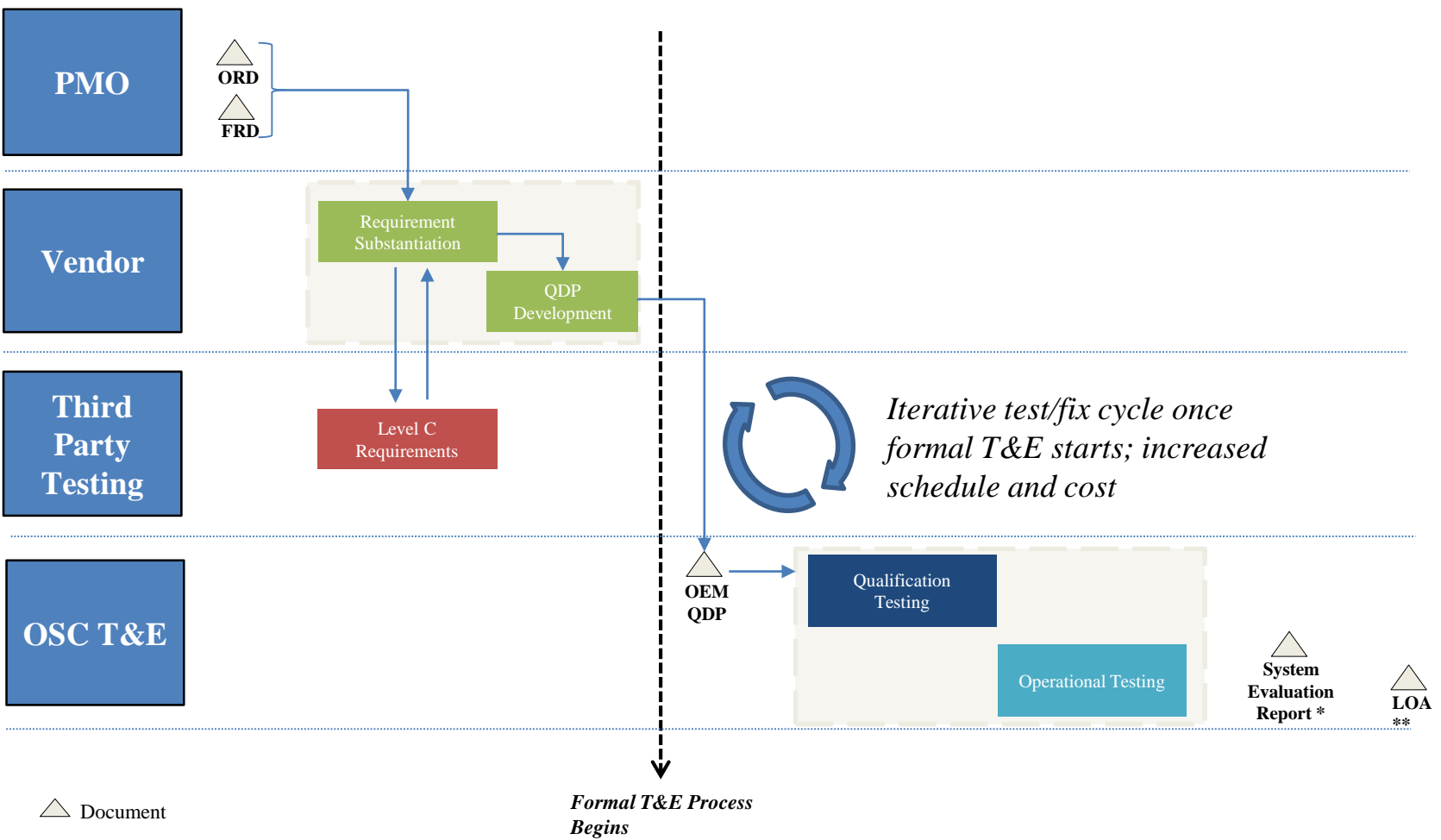


- TPT Applicant reviews application & requirements; makes a business decision to apply
- TPT Applicant gathers required artifacts and completes application
- TPT Applicant submits application
- TSA Review Team reviews the application and requested materials for adherence to TPT requirements
- TSA provides an approval decision to the TPT Applicant based on application review

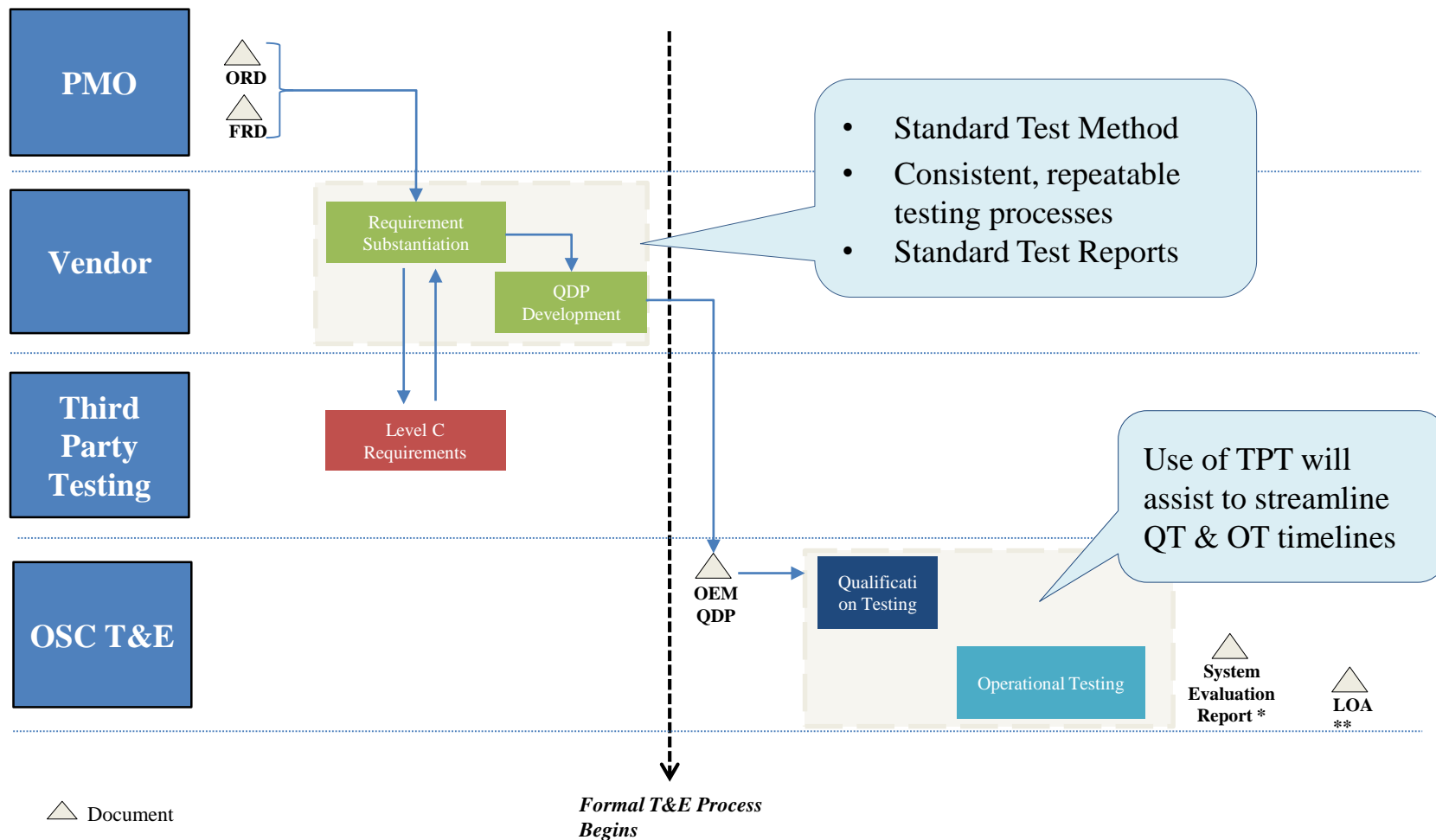
List of Approved TPT Organizations for Use by Vendors



Current T&E Process



Future T&E Process



Appendix



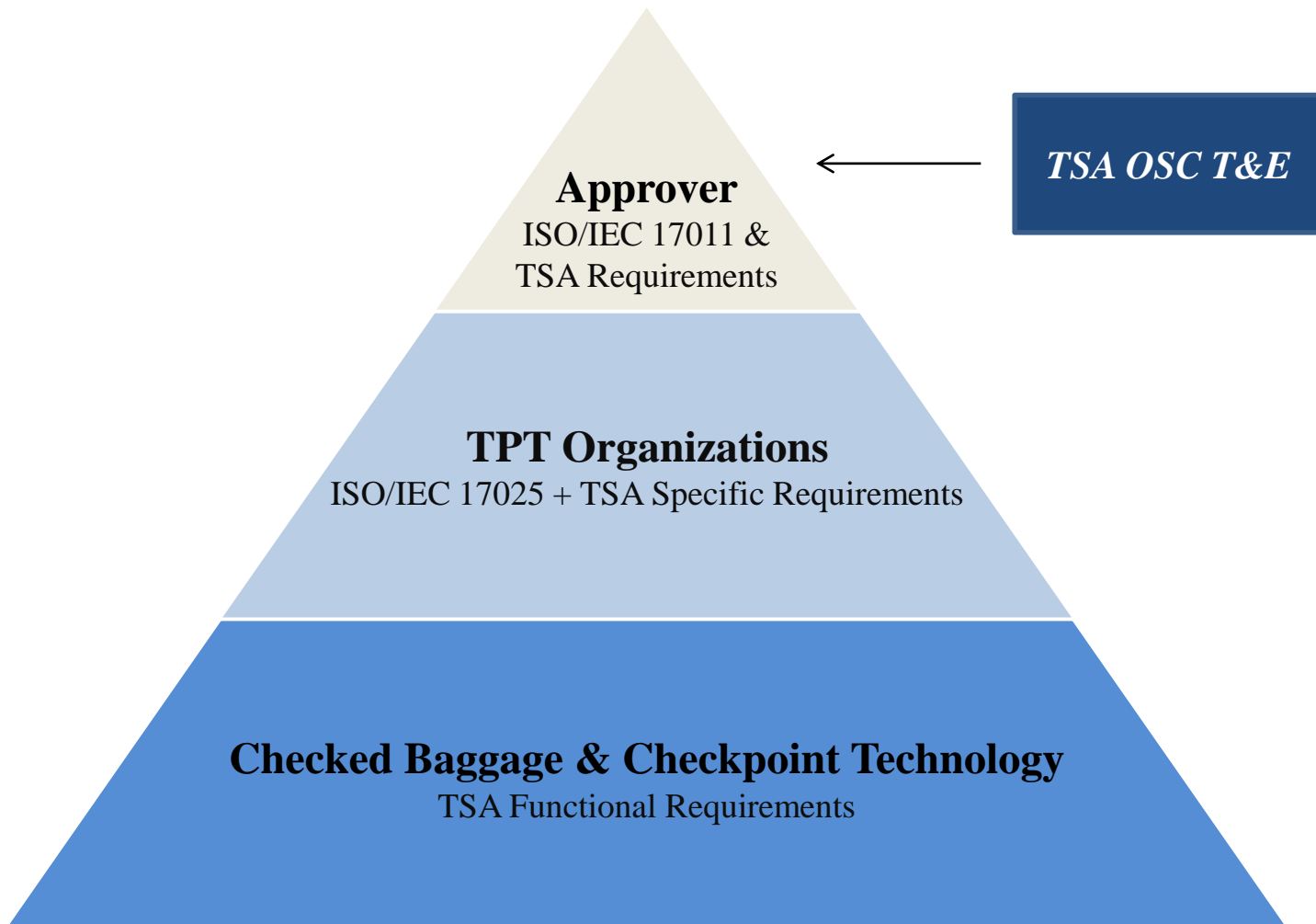
Third Party Testing Strategy

Highlights

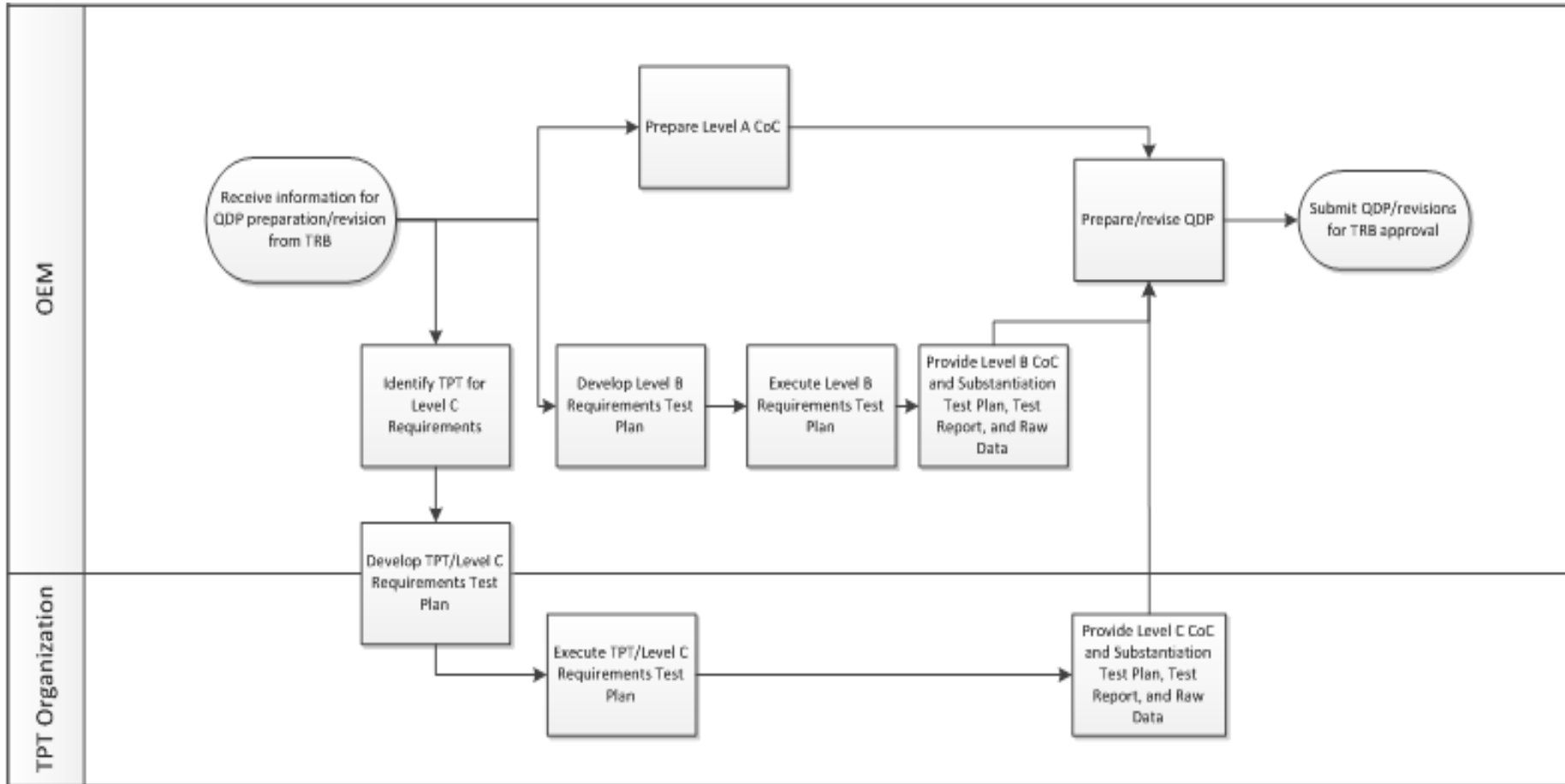
- The TSA requires vendors entering the T&E process use TPT to support the development of their Qualification Data Package (QDP) Level C requirements, resulting in a more mature TSE and a higher quality QDP
- The TSA TPT Strategy limits a TSE to one (1) Significant Failure during QT and/or OT
 - *Removal from testing relies on participation from the TSA Office of Security Operations in scoring failures and their determination and rationale associated with the operational impact
- The TSA reserves the right to put the TSE through QT or OT in it's entirety based on the assessment of the TPT effort and results
- The TSA also reserves the right to determine what information is shared with the OEM and TPT agent



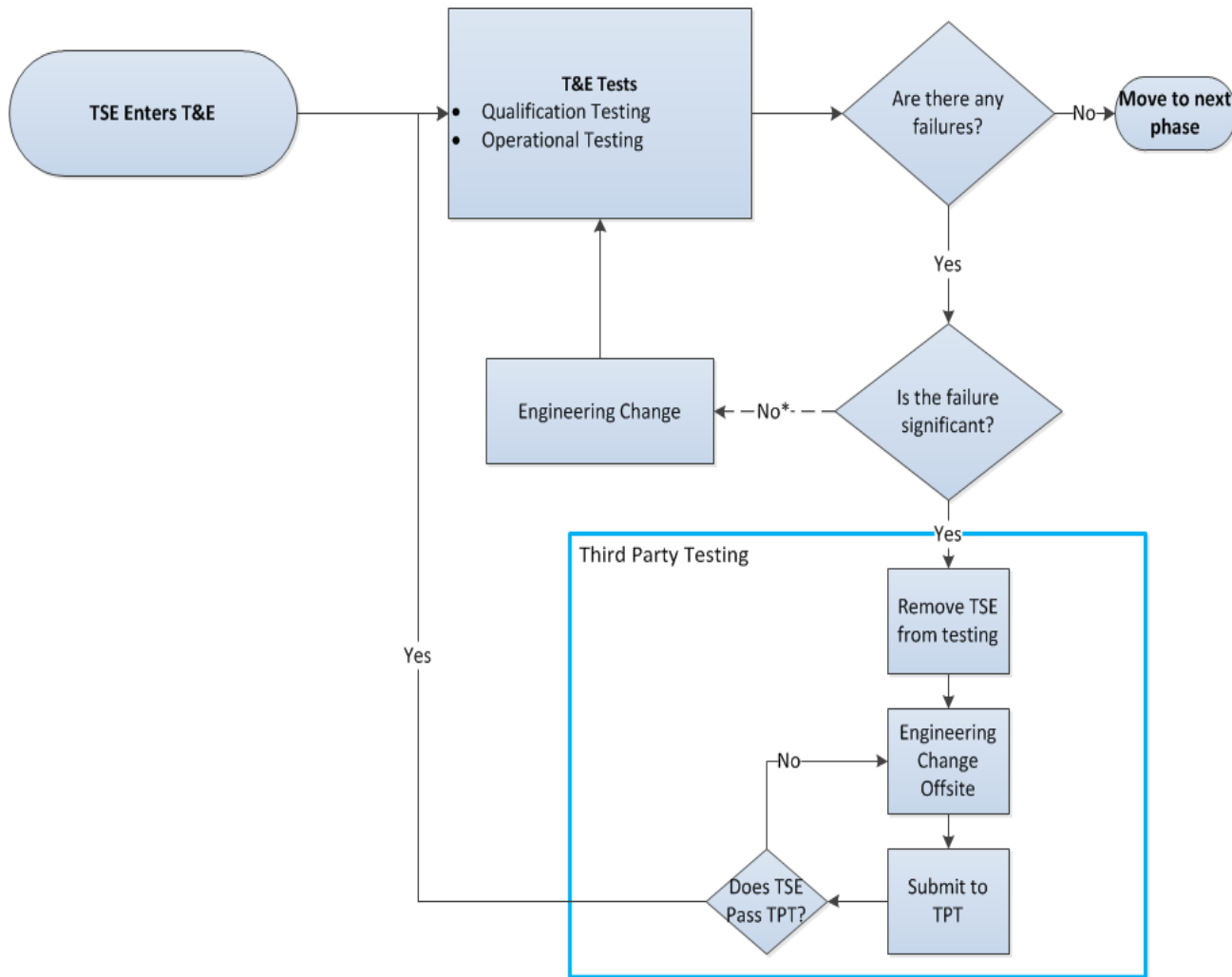
National Conformity Assessment Hierarchy for Testing



TPT Process for QDP Development prior to QT/OT



TPT Process for Significant Failures during QT/OT

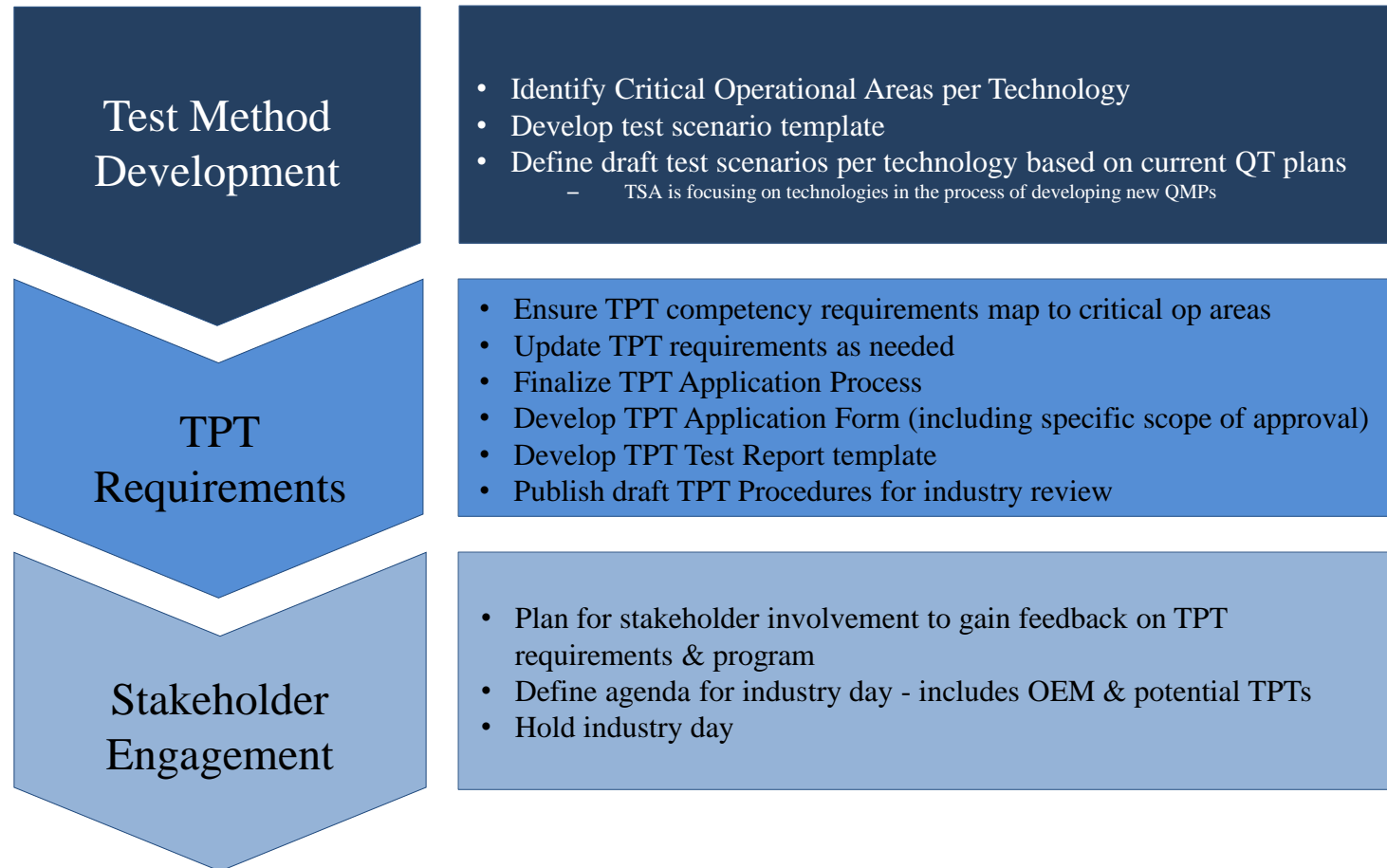


*Pushing TSE to TPT for multiple minor failures is at the discretion of TSA



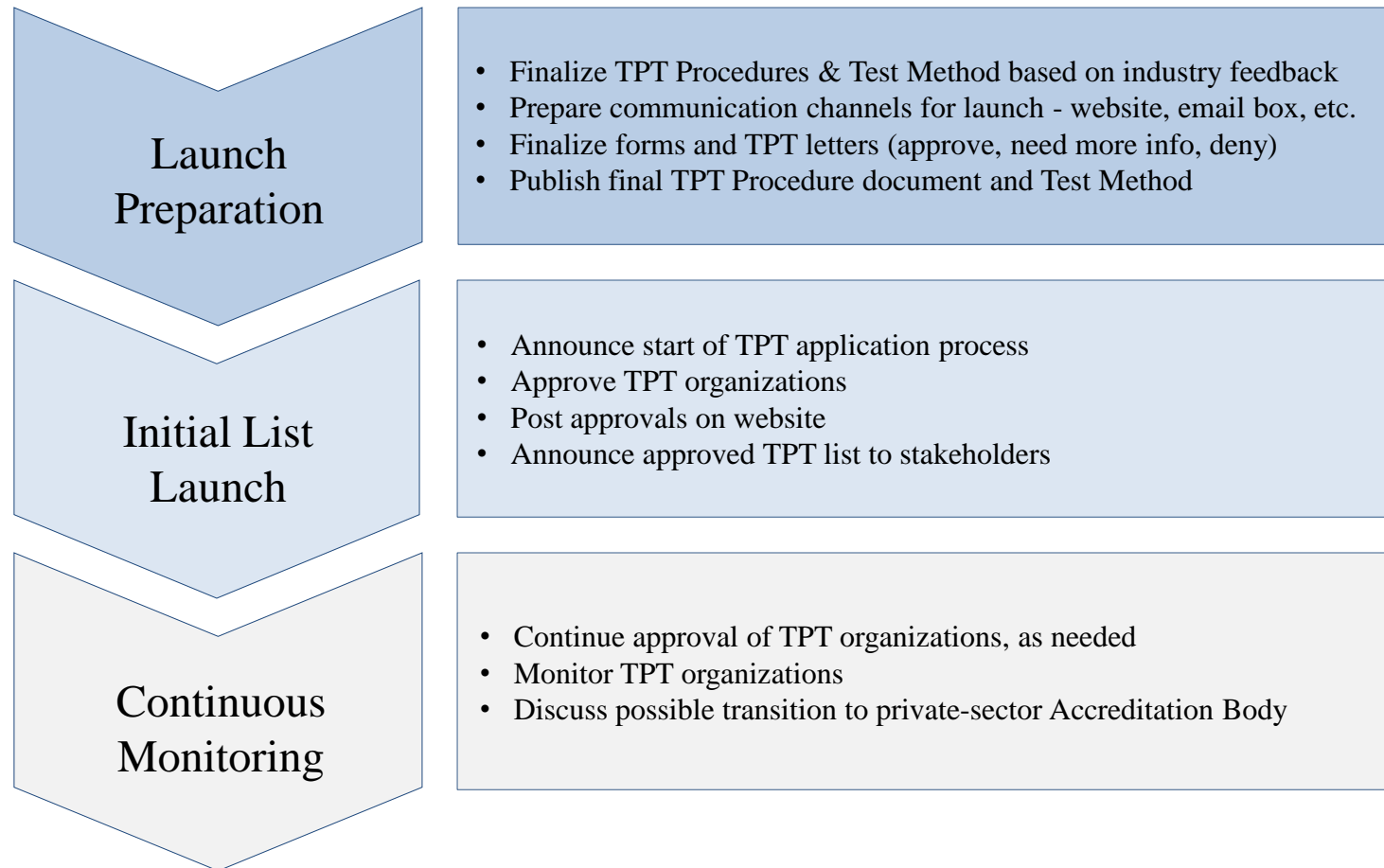
TPT Program: Key Activities & Timeline

The TSA will develop TPT requirements and documentation, collaborating with industry partners in the process.



TPT Program: Key Activities & Timeline (Continued...)

After finalizing all necessary documentation, the TSA will launch its TPT program.



TPT Program: Major Accomplishments



Developed TPT Strategy



Identified critical operational areas per technology for TPT test method development and TPT organization scope definition



Developed test scenario template



Initiated drafting test scenarios for EMD



Initiated drafting test scenarios for ETD