1. (normative)  
   Test procedure (TPRO) - DRD
   1. DRD identification
      1. Requirement identification and source document

This DRD is called from ECSS-E-ST-10-03, requirement 4.3.3.4a.

* + 1. Purpose and objective

The Test Procedure (TPRO) gives directions for conducting a test activity in terms of description, resources, constraints and step-by-step procedure, and provides detailed step-by-step instructions for conducting test activities with the selected test facility and set-up in agreement with the relevant AIT Plan and the test requirements. It contains the activity objective, the applicable documents, the references to the relevant test specification and the test facility configuration, the participants required, the list of configured items under test and tools and the step-by-step activities.

The TPRO is used and filled-in as appropriate during the execution and becomes the “as-run” procedure.

The TPRO is prepared for each test to be conducted at each verification level. The same procedure can be used in case of recurring tests.

It incorporates the requirements of the test specification (DRD Annex B) and uses detailed information contained in other project documentation (e.g. drawings, ICDs).

Several procedures often originate from a single test specification. In certain circumstances involving a test facility (for example during environmental tests) several test procedures can be combined in an overall integrated test procedure.

The “as-run” procedure becomes part of the relevant test report (see ECSS-E-ST-10-02).

Overlaps with the test specification are minimized (see Annex B).

* 1. Expected response
     1. Scope and contents

Introduction

The TPRO shall contain a description of the purpose, objective, content and the reason prompting its preparation.

Any open issue, assumption and constraint relevant to this document shall be stated and described.

Applicable and reference documents

The TPRO shall list the applicable and reference documents in support to the generation of the document.

Definitions and abbreviations

The TPRO shall list the applicable dictionary or glossary and the meaning of specific terms or abbreviations utilized in the document.

Requirements mapping w.r.t. the TSPE

The TPRO shall provide a mapping matrix to the TSPE giving traceability towards the test requirement.

Item under test

The TPRO shall describe the item under test configuration, including any reference to the relevant test configuration list, and any deviation from the specified standard.

The software version of the item under test shall be identified.

Test set-up

The TPRO shall describe the test set-up to be used.

GSE and test tools required

The TPRO shall identify the GSE and test tools to be used in the test activity including test script(s), test software and database(s) versioning number.

Test instrumentation

The TPRO shall identify the test instrumentation, with measurement uncertainties, to be used, including fixtures.

Test facility

The TPRO shall identify the applicable test facility and any data handling system.

Test conditions

The TPRO shall list the applicable standards, the applicable test conditions, in terms of levels, duration and tolerances, and the test data acquisition and reduction.

Documentation

The TPRO shall describe how the applicable documentation is used to support the test activity.

Participants

The TPRO shall list the allocation of responsibilities and resources.

Test constraints and operations

The TPRO shall identify special, safety and hazard conditions, operational constraints, rules for test management relating to changes in procedure, failures, reporting and signing off procedure.

The TPRO shall describe QA and PA aspects applicable to the test.

The TPRO shall contain a placeholder for identifying:

procedure variations, together with justification, and

anomalies.

Step-by-step procedure

1. The TPRO shall provide detailed instructions, including expected results, with tolerances, pass/fail criteria, and identification of specific steps to be witnessed by QA personnel.
2. The step-by-step instructions may be organized in specific tables.
3. When the procedure is automated, the listing of the automated procedure shall be documented to a level allowing consistency check with the TPRO and the TPSE.
   * 1. Special remarks

None.