1. (normative)  
   Test specification (TSPE) - DRD
   1. DRD identification
      1. Requirement identification and source document

This DRD is called from ECSS-E-ST-10-03, requirement 4.3.3.3a.

* + 1. Purpose and objective

The test specification (TSPE) describes in detail the test requirements applicable to any major test activity. In particular, it defines the purpose of the test, the test approach, the item under test and the set-up, the required GSE, test tools, test instrumentation and measurement uncertainties, test conditions with tolerances, test sequence, test facility, pass/fail criteria, required documentation, participants and test schedule.

Since major test activities often cover multiple activity sheets, the structure of the TSPE is adapted accordingly.

The TSPE is used as an input to the test procedures, as a requirements document for booking the environmental test facility and to provide evidence to the customer on certain details of the test activity in advance of the activity itself.

The TSPE is used at each level of the space system decomposition (i.e. equipment, space segment element)

The TSPE provides the requirements for the activities identified in the AIT Plan (as defined in Annex A of ECSS-E-ST-10-03).

The TSPE is used as a basis for writing the relevant test procedures (as defined in Annex C of ECSS-E-ST-10-03) and test report (as defined in Annex C of ECSS-E-ST-10-02).

In writing the test specification potential overlaps with the test procedure is minimized (i.e. the test specification gives emphasis on requirements, the test procedure on operative step by step instructions). For simple tests, merging TSPE and TPRO is acceptable.

* 1. Expected response
     1. Scope and content

Introduction

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

Definitions and abbreviations

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

Requirements to be verified

The TSPE shall list the requirements to be verified (extracted from the VCD) in the specific test and provides traceability where in the test the requirement is covered.

Test approach and test requirements

The TSPE shall summarize the approach to the test activity and the associated requirements as well as the prerequisites to start the test.

Test description

The TSPE shall summarize the configuration of the item under test, the test set-up, the necessary GSE, the test tools, the test conditions and the applicable constraints.

Test facility

The TSPE shall describe the applicable test facility requirements together with the instrumentation and measurement uncertainties, data acquisition and test space segment equipment to be used.

Test sequence

The TSPE shall describe the test activity flow and the associated requirements.

When constraints are identified on activities sequence, the TSPE shall specify them including necessary timely information between test steps.

Pass/fail criteria

The TSPE shall list the test pass/fail criteria in relation to the inputs and output.

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Test documentation

The TSPE shall list the requirements for the involved documentation, including test procedure, test report and PA and QA records.

Test organization

The TSPE shall describe the overall test responsibilities, participants to be involved and the schedule outline.

1. Participation list is often limited to organisation and not individual name.
   * 1. Special remarks

None.