1. (normative)  
   Assembly, integration and test plan (AIT Plan) - DRD
   1. DRD identification
      1. Requirement identification and source document

This DRD is called from ECSS-E-ST-10-03, requirement 4.3.3.2a.

* + 1. Purpose and objective

The assembly integration and test plan is the master plan for the product AIT process. It describes the complete AIT process and demonstrates together with the verification plan how the requirements are verified by inspection and test.

It contains the overall AIT activities and the related verification tools (GSE and facilities), the involved documentation, the AIT management and organization. It also contains the AIT schedule.

It is one of the major inputs to the project schedule and is used to provide the customer a basis for review and evaluation of the effectiveness of the AIT programme and its proposed elements.

An AIT Plan is prepared for the different verification levels covering in detail the AIT activities at that level and outlining the necessary lower level aspects.

The AIT Plan is complementary to the verification plan. It takes into account the test standards defined in the Customer requirements.

The availability of the verification plan is a prerequisite to the preparation of the AIT Plan.

* 1. Expected response
     1. Scope and content

Introduction

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

Definitions and abbreviations

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

Product presentation

The AIT Plan shall briefly describe the selected models and their built status with reference to the verification plan (see ECSS-E-ST-10-02).

Assembly, integration and test programme

The AIT Plan shall document the AIT activities and associated planning.

The AIT Plan shall include test matrix(ces) that link the various tests with the test specifications, test procedures, test blocks and hardware model.

Assembly, integration and test programmes including inspections, should be detailed through dedicated activity sheets.

Activity sheets shall include descriptions of the activity including the tools and GSE to be used, the expected duration of the activity, and the relevant safety or operational constraints.

The sequencing of activities should be presented as flow charts.

GSE and AIT facilities

The AIT Plan shall list and describe the GSE, test software and AIT facilities to be used.

The AIT Plan shall describe the logistics and list the major transportations.

AIT documentation

The AIT Plan shall describe the AIT documents to be produced and their content.

Organization and management

The AIT Plan shall describe the responsibility and management tools applicable to the described AIT process with reference to ECSS-E-ST-10-02.

The AIT Plan shall describe the responsibilities within the project team, the relation to product assurance, quality control and configuration control (tasks with respect to AIT) as well as the responsibility sharing with external partners.

1. Tasks with respect to AIT include for example, anomaly handling, change control, safety, and cleanliness.

The planned reviews and the identified responsibilities shall be stated.

AIT schedule

The AIT Plan shall provide the AIT schedule as reference.

* + 1. Special remarks

None.