1. (normative)  
   Requirements traceability matrix (RTM) - DRD
   1. DRD identification
      1. Requirement identification and source document

This DRD is called from ECSS-E-ST-10, requirement 5.2.2b.

* + 1. Purpose and objective

The requirement traceability matrix (RTM) defines the relationships between the requirements of a deliverable product defined by a technical requirements specification and the apportioned requirements of the product's lower level elements.

The purpose of the RTM is to help verify that all stated and derived requirements are allocated to system components and other deliverables (forward trace).

The matrix is also used to determine the source of requirements (backward trace). Requirements traceability includes tracing any information that satisfy the requirements such as capabilities, design elements, and tests.

The RTM is also used to ensure that all requirements are met and to locate affected system components when there is a requirements change. The ability to locate affected components allows the impact of requirements changes on the system to be determined, facilitating cost, benefit, and schedule determinations.

* 1. Expected response
     1. Scope and content

Introduction

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

Applicable and reference documents

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

The RTM shall include the following:

Technical requirements specification (as defined in ECSS-E-ST-10-06 Annex A) of the product and its lower level elements

Product tree (as defined in ECSS-M-ST-10 Annex B)

Specification tree (as defined in ECSS-E-ST-10 Annex J).

Requirement traceability

The RTM shall list all the technical requirement of the product TS.

The RTM shall list all the lower level elements constituting the product and their technical requirements (contained in the lower-level element TS).

The requirement identification shall be identical in the RTM and the different TS.

Each technical requirement of the product shall be linked to at least one requirement of a lower level element.

1. The required visibility of the traceability down the elements of the product tree is depending on the criticality of some lower level elements w.r.t. the product requirements.

Each technical requirement of a lower level element should be linked to a technical requirement of the product.

When a technical requirement of a lower level element is not linked to a technical requirement of the product, this requirement shall be justified and an evaluation of its existence or removal on the product shall be agreed between the customer and the supplier.

* + 1. Special remarks

None.