1. (normative)  
   Communication system detailed design document (CSDDD) - DRD
   1. DRD identification
      1. Requirement identification and source document

This DRD is called from ECSS-E-ST-50, requirements 5.2.3.3a, 5.2.3.3b , 5.2.4.3b and 5.2.4.3f

* + 1. Purpose and objective

The communication system detailed design document (CSDDD) is produced by the communication system supplier and describes the detailed design of the communication system. Further elaborating the architectural design described in the CSADD, it derives from the CSBD (see ECSS-E-ST-50 Annex B) and CSADD (see ECSS-E-ST-50 Annex E).

The CSDDD describes the detailed design of each of the of the major communication system components identified in the CSADD.

The CSDDD is produced for the CDR, and its acceptance at the CDR by the communication system customer implies a commitment to proceed with the implementation of the system according to that detailed design.

As specified in ECSS-E-ST-50, the CSDDD is frozen after acceptance at the CDR.

Specific detailed tests for the components described in the communication system detailed design document are further described in the CSVP (see ECSS-E-ST-50 Annex D). Any specific analysis activities to justify the detailed design are contained in the CSAD (see ECSS-E-ST-50 Annex C).

As specified in ECSS-E-ST-50, the implementation or procurement of all of the communication system components is based on the communication system detailed design document.

* 1. Expected response
     1. Scope and content

Introduction

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

Applicable and reference documents

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

Mission description and communication system overview

The CSDDD shall describe the main objectives and characteristics of the space mission.

The CSDDD shall describe the architectural design contained in the CSADD.

Communication system detailed design

The CSDDD shall contain the detailed design of the communication system, with all critical detailed design decision justifications, including:

the requirements applicable to each of the major components of the communication system identified in the CSADD,

the detailed design of each major component of the communication system,

a justification of all design decisions relating to the detailed design of each component, and

a complete description of all of the interfaces to each component.

ICDs of the major components

The CSDDD shall include the ICDs for each of the major components of the communication system.

* + 1. Special remarks

This DRD imposes no constraints on the tools used to elaborate the detailed design, and some elements of the detailed design, that can only be viewed with the aid of the tools used in the elaboration of the design, may be accepted.