
**Space data and information transfer
systems — Data entity dictionary
specification language (DEDSL) —
Abstract syntax**

*Systèmes de transfert des informations et données spatiales —
Langage de spécification pour le dictionnaire d'entités de données —
Syntaxe abrégée*

Preview

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International Standard ISO 21961 was prepared by the Consultative Committee for Space Data Systems (CCSDS) (as CCSDS 647.1-B-1, June 2001) and was adopted (without modifications except those stated in Clause 2 of this International Standard) by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 13, *Space data and information transfer systems*.

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PROPOSED

Space data and information transfer systems — Data entity dictionary specification languages (DEDSL) — Abstract syntax

1 Scope

This International Standard gives requirements and defines the abstract syntax for a specification language to be used in the creation of a data entity dictionary (DED).

The scope and field of application are furthermore detailed in subclauses 1.1 and 1.2 of the enclosed CCSDS publication.

2 Requirements

Requirements are the technical recommendations made in the following publication (reproduced on the following pages), which is adopted as an International Standard:

CCSDS 647.1-B-1, June 2001, *Data entity dictionary specification language (DEDSL) — Abstract syntax (CCSD0011)*.

For the purposes of international standardization, the modifications outlined below shall apply to the specific clauses and paragraphs of application CCSDS 647.1-B-1.

Pages i to v

This part is information which is relevant to the CCSDS publication only.

Page 1-7

Add the following information to the references indicated in 1.6:

- [1] Document CCSDS 620.0-B-2, May 1992, is equivalent to ISO 12175:1994.
- [2] Document CCSDS 643.0-B-1, November 1992, is equivalent to ISO 14962:1997.
- [4] Document CCSDS 630.0-B-1, June 1993, is equivalent to ISO 13764:1996.

Update the following reference as follows:

- [6] ISO/IEC 8859-1:1998, *Information technology — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1*

Update and add the following information to the references in Annex C as follows:

[C2] Document CCSDS 644.0-B-2, November 2000, is equivalent to ISO 15889:2003.

[C8] Document CCSDS 301.0-B-3, January 2002, is equivalent to ISO 11104:—¹⁾.

[C11] ISO/IEC 11179-3:2003, *Information technology — Metadata registries (MDR) — Part 3: Registry metamodel and basic attributes*

Delete the following reference:

[C10] It is cited for normative purposes and is given in 1.6, page 1-7 (see reference [7]).

3 Revision of publication CCSDS 647.1-B-1

It has been agreed with the Consultative Committee for Space Data Systems that Subcommittee ISO/TC 20/SC 13 will be consulted in the event of any revision or amendment of publication CCSDS 647.1-B-1. To this end, NASA will act as a liaison body between CCSDS and ISO.

Orbital
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1) To be published. (Revision of ISO 11104:1991)

***Consultative
Committee for
Space Data Systems***

RECOMMENDATION FOR SPACE
DATA SYSTEM STANDARDS

DATA ENTITY DICTIONARY
SPECIFICATION LANGUAGE (DEDSL)—
ABSTRACT SYNTAX
(CCSD0011)

CCSDS 647.1-B-1
BLUE BOOK

June 2001



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CCSDS RECOMMENDATION FOR DEDSL—ABSTRACT SYNTAX

AUTHORITY

Issue:	Blue Book, Issue 1
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This document has been approved for publication by the Management Council of the Consultative Committee for Space Data Systems (CCSDS) and represents the consensus technical agreement of the participating CCSDS Member Agencies. The procedure for review and authorization of CCSDS Recommendations is detailed in [C1], and the record of Agency participation in the authorization of this document can be obtained from the CCSDS Secretariat at the address below.

This document is published and maintained by:

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The Consultative Committee for Space Data Systems (CCSDS) is an organisation officially established by the management of member space Agencies. The Committee meets periodically to address data systems problems that are common to all participants, and to formulate sound technical solutions to these problems. Inasmuch as participation in the CCSDS is completely voluntary, the results of Committee actions are termed **Recommendations** and are not considered binding on any Agency.

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CCSDS RECOMMENDATION FOR DEDSL—ABSTRACT SYNTAX

FOREWORD

This Recommendation is a technical Recommendation that provides a model and language to increase the standardisation of the expression of semantic concepts that are to be carried with data. These semantic concepts are given standard names, and a standard way of expressing them is also provided. The semantic information may be conveyed either in a computer-processable manner or via conventional (e.g., paper) documentation.

Through the process of normal evolution, it is expected that expansion, deletion or modification to this document may occur. This Recommendation is therefore subject to CCSDS document management and change control procedures defined in reference [C1]. Current versions of CCSDS documents are maintained at the CCSDS Web site:

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CCSDS RECOMMENDATION FOR DEDSL—ABSTRACT SYNTAX

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CCSDS RECOMMENDATION FOR DEDSL—ABSTRACT SYNTAX

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