
**Space data and information transfer
systems — Mission operations
common object model**

*Systèmes de transfert des informations et données spatiales — Modèle
d'objet commun des opérations de mission*



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The Consultative Committee for Space Data Systems

Recommendation for Space Data System Standards

**MISSION OPERATIONS
COMMON OBJECT
MODEL**

RECOMMENDED STANDARD

CCSDS 521.1-B-1

BLUE BOOK

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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 documents is detailed in *Organization and Processes for the Consultative Committee for Space Data Systems* (CCSDS A02.1-Y-3), and the record of Agency participation in the authorization of this document can be obtained from the CCSDS Secretariat at the address below.

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FOREWORD

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1 INTRODUCTION

1.1 GENERAL

This Recommended Standard defines the Mission Operations (MO) Common Object Model (COM) in conformance with the service framework specified in annex B of Mission Operations Services Concept (reference [C1]).

The MO COM is a generic service template that provides a Common Object Model to the Mission Operation services defined in reference [C1]. These Mission Operations services are defined in terms of the COM and the Message Abstraction Layer (MAL) (reference [2]).

1.2 PURPOSE AND SCOPE

This Recommended Standard defines, in an abstract manner, the COM in terms of:

- a) the operations necessary to provide the service;
- b) the parameter data associated with each operation;
- c) the required behaviour of each operation;
- d) the use of the model.

It does not specify:

- a) individual implementations or products;
- b) the implementation of entities or interfaces within real systems;
- c) the methods or technologies required for communications.

1.3 DOCUMENT STRUCTURE

This Recommended Standard is organised as follows:

- a) section 1 provides purpose and scope, and lists definitions, conventions, and references used throughout the Recommended Standard;
- b) section 2 presents an overview of the concepts;
- c) section 3 presents the COM specification;
- d) section 4 is a formal specification of the COM data structures;
- e) section 5 is a formal specification of the COM errors;
- f) section 6 details the location of the formal service specification Extensible Markup Language (XML) schema.