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EOSDIS Core System Project

Release B SDPS/CSMS Design Specification Overview for the ECS Project

March 1996

Hughes Information Technology Systems
Upper Marlboro, Maryland

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Preface

This document is one of eighteen comprising the detailed design specifications of the SDPS and CSMS subsystem for Release B of the ECS project. A complete list of the design specification documents is given below. Of particular interest are documents number 305-CD-020, which provides an overview of the subsystems and 305-CD-039, the Data Dictionary, for those reviewing the object models in detail.

The SDPS and CSMS subsystem design specification documents for Release B of the ECS Project include:

305-CD-020	Release B Overview of the SDPS and CSMS Segment System Design Specification
305-CD-021	Release B SDPS Client Subsystem Design Specification
305-CD-022	Release B SDPS Interoperability Subsystem Design Specification
305-CD-023	Release B SDPS Data Management Subsystem Design Specification
305-CD-024	Release B SDPS Data Server Subsystem Design Specification
305-CD-025	Release B SDPS Ingest Subsystem Design Specification
305-CD-026	Release B SDPS Planning Subsystem Design Specification
305-CD-027	Release B SDPS Data Processing Subsystem Design Specification
305-CD-028	Release B CSMS Segment Communications Subsystem Design Specification
305-CD-029	Release B CSMS Segment Systems Management Subsystem Design Specification
305-CD-030	Release B GSFC Distributed Active Archive Center Design Specification
305-CD-031	Release B LaRC Distributed Active Archive Center Design Specification
305-CD-033	Release B EDC Distributed Active Archive Center Design Specification
305-CD-034	Release B ASF Data Center Distributed Active Archive Center Design Specification
305-CD-035	Release B NSIDC Distributed Active Archive Center Design Specification
305-CD-036	Release B JPL Distributed Active Archive Center Design Specification
305-CD-037	Release B ORNL Distributed Active Archive Center Design Specification
305-CD-038	Release B System Monitoring and Coordination Center Design Specification
305-CD-039	Release B Data Dictionary for Subsystem Design Specification

Object models presented in this document have been exported directly from CASE or DBMS tools and in some cases contain too much detail to be easily readable within hard copy page constraints. The reader is encouraged to view these drawings on line using the Portable Document Format (PDF) electronic copy available via the ECS Data Handling System (EDHS) at: URL http://edhs1.gsfc.nasa.gov.

This document is a formal contract deliverable with an approval code of 2; as such it requires Government review and approval prior to acceptance and use. This document is under ECS contractor configuration control. Once this document is approved, Contractor approved changes are handled in accordance with Class I and Class II change control requirements described in the EOS Configuration Management Plan, and changes to this document shall be made by document change notice (DCN) or by complete revision.

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Abstract

This subdocument, Release B Overview of the SDPS and CSMS Segment System Design Specification for the ECS Project, supplies a basic overview for both the SDPS and CSMS segments of the ECS project. It details the Release B components and the interactions of those components with each other and with other EOSDIS components and discusses their relationship with external entities. It describes basic factors in development of these components and prepares the user for the more detailed analyses of subsystem designs in the in-depth series of subdocuments that follow. This document is intended to be read by all parties interested in the Release B design. For the casual reviewer this document provides a solid understanding of the ECS and Release B design. For those interested in an in-depth understanding of the design, this subdocument provides an integrated view of the subsystems as well as certain design concepts that span subsystems. It provides the context necessary for understanding the subsequent subdocuments.

Keywords:

Release B, Overview, SDPS, CSMS, Design, Critical Design, Subsystem, Architecture, Software, Hardware, Object Oriented, Security, Gateway, System Managment, Reports, User Interface, Client, GUI, Key Mechanisms

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Appendix A. Summary of ECS Data Flows and DAAC System Interfaces

Appendix B. Subsystem Context Diagrams

Abbreviations and Acronyms