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Reference model for an open
archival information system (OAIS)**

*Pratiques des systèmes de données spatiales — Modèle de
référence pour un système ouvert d'archivage d'information (SOAI)*

**Third edition
2025-03**

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This document was prepared by the Consultative Committee for Space Data Systems (CCSDS) (as CCSDS 650.0-M-3, December 2024) and drafted in accordance with its editorial rules. It was assigned to Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Subcommittee SC 13, *Space data and information transfer systems* and adopted under the "fast-track procedure".

This third edition cancels and replaces the second edition (ISO 14721:2012), which has been technically revised.

The main changes are as follows:

- Changes from the current issue are too numerous to permit meaningful markup.
- This issue has additions to, and clarifications of, concepts and terminology, for example:
 - The relationship between Preservation Description Information (PDI) and Content Data Object has been clarified, emphasizing that, as has been stated since the original version of OAIS, any Information Object may serve as Content Information.

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

ISO 14721:2025(en)

CCSDS RECOMMENDED PRACTICE FOR AN OAIS REFERENCE MODEL

- The concept of Preservation Objectives has been introduced to allow “Independently Understandable” to be more consistently testable.
- Consistency with the Producer-Archive Interface Specification (PAIS) (CCSDS 651.1-B-1) has been improved.
- Diagram conventions have been clarified.
- Some definitions in the Glossary have been clarified.
- Consistency between the diagrams of the Functional Entities and supporting text has been improved.
- A Preservation Watch function has been added to the Preservation Planning Functional Entity.
- The definition of the Information Package has been updated for consistency.
- Additional preservation techniques have been described explicitly in addition to Migration.
- Additional types of Archive interaction have been added, including primary-supporting Archives.
- Annex A is marked as Informative. It had previously erroneously been marked as Normative.
- Annex B from the previous issue described the relationship of OAIS to other standards; but its contents were continually out of date as those other standards develop along different directions and timelines as compared to OAIS development. Also, subsection 1.5 from the previous issue, which provided a roadmap to related Standards which could be developed was removed since a number of those standards are now available. Both have been replaced by pointers in annex B to informative documents on the CCSDS web site which can be updated more rapidly.

Any feedback or questions on this document should be directed to the user’s national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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