

SVENSK STANDARD

SS-EN 9300-013:2013



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Aerospace series – LOTAR Long Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data – Part 013: Reference process description ”Archival Storage”

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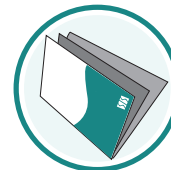
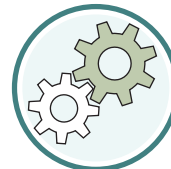
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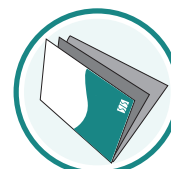
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The European Standard EN 9300-013:2013 has the status of a Swedish Standard. This document contains the official version of EN 9300-013:2013.

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EUROPEAN STANDARD

EN 9300-013

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2013

ICS 01.110; 35.240.30; 35.240.60; 49.020

English Version

**Aerospace series - LOTAR LOng Term Archiving and Retrieval
of digital technical product documentation such as 3D, CAD and
PDM data - Part 013: Reference process description "Archival
Storage"**

Série aérospatiale - LOTAR - Archivage Long Terme et
récupération des données techniques produits numériques,
telles que CAD, 3D et PDM - Partie 013: Description du
processus de référence "Stockage d'archive"

Luft- und Raumfahrt - LOTAR - Langzeitarchivierung und
Bereitstellung digitaler technischer
Produktdokumentationen, beispielsweise 3D, CAD und
PDM Daten - Teil 013: Referenzprozessbeschreibung
"Speicherung"

This European Standard was approved by CEN on 24 November 2012.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Foreword

This document (EN 9300-013:2013) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by July 2013, and conflicting national standards shall be withdrawn at the latest by July 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This European Standard was prepared jointly by ASD-STAN and the PROSTEP iViP Association.

The PROSTEP iViP Association is an international non-profit association in Europe. For establishing leadership in IT-based engineering it offers a moderated platform to its nearly 200 members from leading industries, system vendors and research institutions. Its product and process data standardization activities at European and worldwide levels are well known and accepted. The PROSTEP iViP Association sees this standard and the related parts as a milestone of product data technology.

Users should note that all standards undergo revision from time to time and that any reference made herein to any other standard implies its latest edition, unless otherwise stated.

1 Scope

This European Standard provides a detailed description for the recommended process of the Archival Information Package within the archive as overviewed in EN 9300-010. The main focus lies in the secure process, which implies the setting of digital signatures, disaster recovery and update of archive meta database.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 9300-003, *Aerospace series — LOTAR — LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data — Part 003: Fundamentals and concepts*

EN 9300-007, *Aerospace series — LOTAR — LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data — Part 007: Terms and References*¹⁾

EN 9300-010, *Aerospace series — LOTAR — LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data — Part 010: Overview Data Flow*¹⁾

ISO 14721:2003, *Space data and information transfer systems — Open archival information system — Reference model [OAIS]*

3 Terms, definitions and abbreviations

For the purposes of this standard, the terms, definitions and abbreviations given in EN 9300-007 shall apply.

4 Applicability

This EN 9300-013 is applicable to new 3-D product data records and may be applicable to existing 3D product data records, on current and earlier products, produced using previous regulations, standards and procedures. The current version is focused on product data as defined in the domain specific parts.

1) Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

5 Archival storage

See Figure 1.

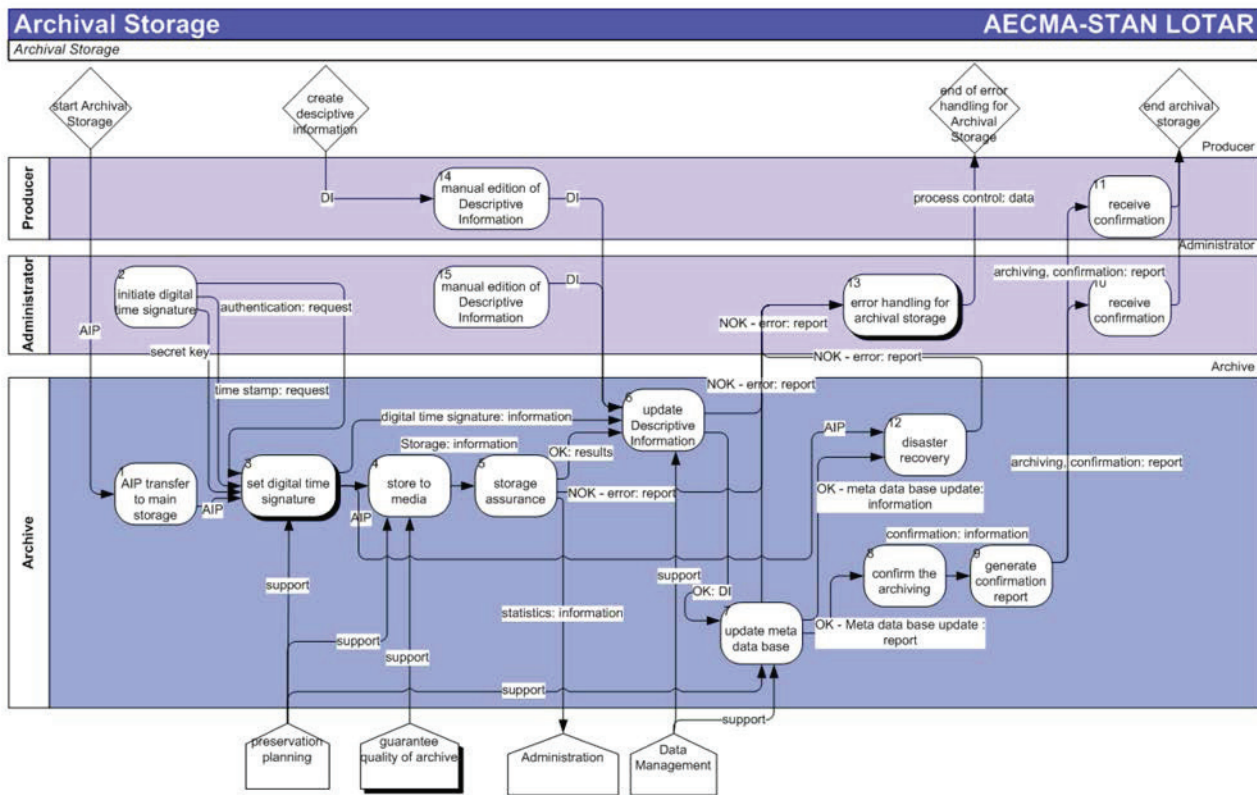


Figure 1 — Archival Storage

The process includes the setting of digital time signatures, generation of additional Descriptive Information (DI) for AIP's (meta data for the archive), the physical storage of the data within the archive and error checking as well as the steps needed disaster recovery of the stored data. Each company should meet the general recommendations for an archive system and its security, as for example described in ISO 14721:2003 (OAIS). These general recommendations are out of scope. The sub process shall be certified.

Process Steps Store to Media, Storage assurance, Update meta-database and Disaster Recovery cover administrative aspects of the archive and its software. The steps are out of scope for the process description and this standard. They are shown for completeness.

If needed by the community, the preservation of the Descriptive Information of the Archive will be described in the recommended practices of the part 13.

Input data:

- AIP
- DI

Output data:

- Process control data

6 Detailed process steps description

6.1 General

Input and output data described in this standard represent the minimal requirements for the fulfilment of the process steps. Additional data may be added, but must match at a minimum the requirements for the information package. (See EN 9300-003, Section 5.3.2.1 “Definition of the core model”).

6.2 AIP transfer to main storage

The Archive transfers the AIP from the working environment to the physical storage environment.

Input data:

- AIP

Output data:

- AIP

6.3 Initiate digital time signature process

The administrator initiates the digital time signature process.

Output data:

- Request for authentication
- Request for time stamp
- Secret key

6.4 Set digital time signature

The archive sets a digital (time) signature according to the applicable digital signature law. This assures the data integrity, readability and exchangeability during the retention period, and may be used as evidence when identifying the provenance of the information.

NOTE A digital time signature is any unique set of letters, characters, symbols or code attached to a digital document with the intention of identifying the sender. At the lower end of the e-signature security scale are formats such as email signatures and the simple attachment of signature images. Higher up the scale we find more secure formats such as pin numbers. At the upper end of the scale are formats using more complex technologies combining mathematical processes, encryption and controlled systems.

Input data:

- Request for authentication
- Request for time stamp
- Secret key
- AIP
- Support information

Output data:

- AIP
- Digital signature information