

Irish Standard I.S. EN 9300-003:2012

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

© CEN 2012

No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments/	corrigenda/National Anne.	xes issued since public	ration:	
The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:				
I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.				
S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.				
SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.				
This document replaces:				
This document is based on: EN 9300-003:2012	<i>Published:</i> 3 October, 2012			
This document was publish under the authority of the N and comes into effect on: 3 October, 2012			ICS number: 01.110 35.240.30 49.020	
NSAI 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie		

Údarás um Chaighdeáin Náisiúnta na hÉireann

EUROPEAN STANDARD NORME EUROPÉENNE

EN 9300-003

EUROPÄISCHE NORM

September 2012

ICS 01.110; 35.240.30; 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 003: Fundamentals and concepts

Série aérospatiale - LOTAR - Archivage long terme et récupération des données techniques produits numériques, telles que CAD D et PMD - Partie 003: Fondamentaux et concepts

Luft- und Raumfahrt - LOTAR - Langzeit-Archivierung und -Bereitstellung digitaler technischer Produktdokumentationen, wie zum Beispiel von 3D-, CADund PDM-Daten - Teil 003: Grundlagen und Konzepte

This European Standard was approved by CEN on 10 March 2011.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN 9300-003:2012 (E)

Con	Contents		
Forev	vord	4	
1	Scope	5	
2	Normative references		
3	Terms, definitions and abbreviations		
4	Major differences of terms		
4 4.1	Introduction		
4.1.1	General		
4.1.2	Invariance	6	
4.1.3	Objectives for keeping digital data	6	
4.1.4	Length of time of keeping data		
4.1.5	Stored Form		
4.2	Terminology		
4.2.1	General		
4.2.2 4.2.3	Product information model		
4.2.4	Product modelBusiness Application		
4.2.4	Retention		
4.2.6	Long Term Archiving		
4.3	Scope of EN 9300		
4.4	Relation to Legal Admissibility Standards		
5	Applicability	13	
6	Overview of referenced standards	13	
6.1	General		
6.2	Introduction to OAIS — ISO 14721	13	
6.2.1	General		
6.2.2	The OAIS Environment		
6.2.3	The OAIS model		
6.3	Introduction to ISO 10303		
6.3.1	General	15	
6.3.2	ISO 10303-203:1994 and Edition 2 draft, Configuration controlled 3D designs of mechanical parts and assemblies	17	
6.3.3	ISO 10303-214:2001 and ISO 10303-214:2003, Core Data for Automotive Mechanical	1 /	
	Design Processes	17	
6.3.4	ISO 10303-233, System engineering data representation	18	
6.3.5	ISO 10303-209:2001, Composite and metal structural analysis and related design		
6.3.6	ISO 10303-237, Computational fluid dynamics	18	
6.3.7	ISO 10303-210:2001 and Edition 2 draft, Electronic assembly, interconnect and packaging	40	
6.3.8	designISO 10303-212:2001, Electro technical design and installation		
	•		
7	Fundamentals and concepts		
7.1	Overview		
7.2	Processes	_	
7.3	Data		
7.3.1 7.3.2	Archiving Product Models vs. Archiving Documents		
7.3.2 7.3.3	Data content		
7.3.4	Archiving approach for complex product models		
7.3.5	Data quality assurance		

EN 9300-003:2012 (E)

7.3.6 7.4	Process phases and cyclesMapping approach onto physical data representations	.27 .30
7.5	Fundamentals for testing the LOTAR process and components	.31
7.6	System Architecture Framework	33
8	Description methods	.33

EN 9300-003:2012 (E)

Foreword

This document (EN 9300-003:2012) 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 March 2013, and conflicting national standards shall be withdrawn at the latest by March 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.

This 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.

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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.

1 Scope

This European Standard defines basic terms, e.g. *Long Term Archiving* and *Retention* and identifies the context and scope of EN 9300. The section *Fundamentals* describes the basic concepts and approaches of EN 9300 and referenced related standards.

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 9103, Aerospace series — Quality management systems — Variation management of key characteristics

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)

ISO 10303-203:1994 and Edition 2 draft, Industrial automation systems and integration — Product data representation and exchange — Part 203: Application protocol: Configuration controlled 3D designs of mechanical parts and assemblies

ISO 10303-209:2001, Industrial automation systems and integration — Product data representation and exchange — Part 209: Application protocol: Composite and metallic structural analysis and related design

ISO 10303-210:2001, Industrial automation systems and integration — Product data representation and exchange — Part 210: Application protocol: Electronic assembly, interconnection, and packaging design

ISO 10303-212:2001, Industrial automation systems and integration — Product data representation and exchange — Part 212: Application protocol: Electrotechnical design and installation

ISO 10303-214:2001 and ISO 10303-214:2003, Industrial automation systems and integration — Product data representation and exchange — Part 214: Application protocol: Core data for automotive mechanical design processes

ISO/DIS 10303-233, Industrial automation systems and integration — Product data representation and exchange — Part 233: Systems engineering data representation¹⁾

ISO 10303-237, Industrial automation systems and integration — Product data representation and exchange — *Part 237, Application protocol: Fluid dynamics*¹⁾

ISO 14721, Space data and information transfer systems — Open archival information system — Reference model

ARP9034, A Process Standard for the Storage, Retrieval and Use of Three-Dimensional Type Design Data

BP 0008, Code of Practice for Legal Admissibility and Evidential Weight of Information Stored electronically

7 tha all parts quoted in this standard

1) In preparation at the date of publication of this standard.

^{*} And all parts quoted in this standard.



Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation