Irish Standard
I.S. EN 9300-005:2017

Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data - Part 005: Authentication and Verification

I.S. EN 9300-005:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

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National Foreword

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 9300-005

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English Version

Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data - Part 005: Authentication and Verification

Série aérospatiale - LOTAR - Archivage long terme et récupération des données techniques produits numériques telles que CAD 3D et PDM - Partie 005 : Authentification et Vérification

Luft- und Raumfahrt - LOTAR - Langzeit-Archivierung und -Bereitstellung digitaler technischer Produktdokumentationen, wie zum Beispiel von 3D-, CAD- und PDM-Daten - Teil 005: Authentifizierung und Verifizierung

This European Standard was approved by CEN on 16 July 2017.

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

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European foreword

This document (EN 9300-005:2017) 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of an identical text or by endorsement, at the latest by April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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

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1 Scope

EN 9300-005 describes the fundamentals and concepts of authentication and verification of the integrity of digital documents and their content during the archiving and retrieval processes. The Data Domain Parts EN 9300-x00 will specify qualification measures for the content of the document. The fundamentals given in this document cover the requirements, methods and recommendations for their implementation within an archiving system.

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 (all parts), *Aerospace series — LOTAR — LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data*

3 Terms, definitions and abbreviations

For the purposes of this standard, the terms, definitions and abbreviations given in EN 9300-003 and EN 9300-007 shall apply.

3.1
authentication
authentication has to prove:

— the *originality* and *integrity* of a document and its contents;

— the identity of a user.

Authentication of an electronic document establishes that the content is unchanged from to the original information. Information is *original* if it is demonstrable that the information belongs to the supposed author.

Authentication may depend upon one or more authentication factors.

Unlike verification and validation, authentication makes no statement about the quality of data in terms of usability in the archiving process chain of e.g. conversion or reuse.

3.2
asymmetric keys
asymmetric keys are pairs of keys, created in one step; they can be used in both directions. Encryption with the public key can only be decrypted with the private key; if the encryption is done with the private key, the decryption can only done with the public key; such a key pair can be used for encryption and for signing

3.2.1
public key
public key is the part of the asymmetric key pair that is known to everyone