Certificate

The certification body of TÜV Informationstechnik GmbH hereby awards this certificate to the company

AIRBUS S.A.S
1 Rond Point Maurice Bellonte
31707 Blagnac, France

to confirm that its document management- and archiving solution

ZAMIZ-IMA 2D/3D

fulfils all applicable audit criteria for document management solutions

AC-DMS, 5th edition 2019, EN 9300 series*1)

*1) Applied levels: Verification Level 0 & Validation Level 1.

The requirements are summarized in the appendix to the certificate.

The appendix is part of the certificate and consists of 11 pages.

The certificate is valid only in conjunction with the evaluation report.

AC-DMS 2022 TÜViT® Trusted Site

Certificate validity:
2022-02-28 – 2024-02-28

Certificate ID: 9967.22

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Essen, 2022-02-28

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«VOI»
AC-DMS
is a criteria catalog of VOI
www.voi.de

TO CERTIFICATE

Certification Scheme

The certification body of TÜV Informationstechnik GmbH performs its certification on the basis of the following certification scheme:

- German document: "Zertifizierungsprogramm (nicht akkreditierter Bereich) der Zertifizierungsstelle der TÜV Informationstechnik GmbH", version 1.1 as of 2020-03-01, TÜV Informationstechnik GmbH

Evaluation Report

- „Audit Report – Re-Certification – AC-DMS document management and archiving solution, ZAMIZ-IMA 2D/3D", Version 1.1 as of 2022-02-25, TÜV Informationstechnik GmbH

Evaluation Requirements

- AC-DMS – Audit criteria for electronic document management processes and associated IT solutions, 5th revised edition 2019, VOI – Verband Organisations- und Informationssysteme e. V.

For the 3D data the following requirements were additional considered in the audit:

- EN 9300-002; Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data, Part 002: Requirements, 2018, ASD-STAN
- EN 9300-100; Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data, Part 100: Common concepts for Long term archiving and retrieval of CAD 3D mechanical information, 2018, ASD-STAN

- EN 9300-110; Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data, Part 110: CAD mechanical 3D Explicit geometry information, 2018, ASD-STAN
- EN 9300-115; Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D, CAD and PDM data, Part 115: Explicit CAD assembly structure, 2018, ASD-STAN
- EN 9300-120; Aerospace series - LOTAR - LOng Term Archiving and Retrieval of digital technical product documentation such as 3D CAD and PDM data, Part 120: CAD 3D explicit geometry with product and manufacturing information, 2019, ASD-STAN

The Evaluation Requirements are summarized at the end. Not applicable requirements are printed in grey.

Evaluation Target

Evaluation Target is the document management- and archiving solution ZAMIZ-IMA 2D/3D based on the following documentation

- Procedural Documentation ZAMIZ – General Part -, version 4.5 as of 2019-08-26, Airbus Operations GmbH
- Procedural Documentation ZAMIZ Archiving with ImageMaster 8 Basic Module as of 2019-08-26, Airbus Operations GmbH
- Procedural Documentation ZAMIZ/AIRINA Archiving using ImageMaster – Stock of Documents, Version 3.0 as of 2019-08-25, Airbus Operations GmbH

- Procedural Documentation ZAMIZ / LTA3D, Version 2.0 as of 2019-08-22, Airbus Operations GmbH

Evaluation Result

- All applicable AC-DMS and EN 9300-002, -100, -110, 115 and -120 evaluation requirements for verification level 0 and validation level 1 are fulfilled.
- The recommendations of the evaluation report have to be regarded.

Summary of the Evaluation Requirement

AC-DMS Requirements

1 General description of area of use

1.1 Description of the organisation
1.2 Locations
1.3 Organisation structure

2 Task-related and inherently logical solution

2.1 Framework, tasks and guidelines
2.2 Description of the organisation
2.3 Document inventories
2.4 Digitisation and taking over of paper documents
2.5 Destruction of paper and other original documents
2.6 Takeover of documents received in electronic form
2.7 Handling of documents with electronic signatures
2.8 Handling of emails
2.9 Takeover procedure for mass digital data
2.10 Indexing
2.11 Archiving
2.12 Search and access
2.13 Check-in / Check-out
2.14 Editing and assigning versions

2.15 Onward transfer
2.16 Reproduction
2.17 Deletion

3 Technical system solution

3.1 Graphic representation of system
3.2 Storage systems
3.3 Recording systems
3.4 Output systems
3.5 Virtualisation
3.6 Server hardware
3.7 Client hardware
3.8 Server software
3.9 Client software
3.10 Special case: individual software
3.11 Interfaces
3.12 Network architecture description
3.13 Cloud management
3.14 Electronic signatures, seals and time stamps

4 Information security

4.1 General information security concept
4.2 Specific requirements for the information security concept
4.3 Backup concept
4.4 User administration and authorisation concept
4.5 Entry controls
4.6 Access and data access controls
4.7 Transaction, integrity and consistency security
4.8 Recording (protocols/logs)
4.9 Safeguarding against failure
4.10 Data protection and control measures

5 Technical operation

5.1 Responsibilities
5.2 Prerequisites with respect to buildings

5.3 Operating conditions for hardware
5.4 Operating conditions for software
5.5 Data backup
5.6 Handling of storage media
5.7 Monitoring of orderly operation
5.8 Responsibility for maintenance and troubleshooting
5.9 Preventive maintenance
5.10 Documentation of the maintenance processes
5.11 Troubleshooting
5.12 Restart
5.13 Recovery
5.14 Updating of the hardware
5.15 Updating of the software

6 Long-term availability and migration

6.1 Concept for long-term availability
6.2 Migration concept
6.3 Control
6.4 Performance of migration

7 Qualification of employees

7.1 Roles
7.2 Necessary knowledge
7.3 Responsibilities
7.4 Qualification measures
7.5 Documentation of the qualifications and measures

8 Tests

8.1 Test concept
8.2 Test plans and test rules and regulations
8.3 Test protocols

9 Outsourcing

9.1 Services and responsibility
9.2 Process documentation

9.3 Interfaces
9.4 Control

10 Internal Control System (ICS)
10.1 Description of the ICS method
10.2 Traceability of controls
10.3 Documentation of the organisational control measures
10.4 Documentation of the technical control measures
10.5 Process documentation
10.6 Control and evaluation of the ICS
10.7 Assignment of responsibilities

EN 9300-002: Requirements

1 General requirements
1.1 System preparation
1.2 Identification of preservation use cases
1.3 Categorization of digital product data to archive
1.4 Specification of the descriptive information of the SIP
1.5 Description of the quality control criteria
1.6 Description of the derivation procedures for the SIP

2 Data preparation
2.1 Preparation of the descriptive information associated to each source of product information
2.2 Preparation of the verification information for each SIP
2.3 Preparation of the validation information associated to each source product information

3 Ingest
3.1 Approval prior to release
3.2 Error detection methods
3.3 Translation audit
3.4 Content modifications and updates
3.5 Proprietary rights

4 Archive storage

4.1 Notification of storage requests
4.2 Operational statistics
4.3 Archive maintenance
4.4 Error checking
4.5 Auditing requirements
4.6 Auditing for data integrity errors
4.7 Representative sampling
4.8 Corrective action plans
4.9 Audit reporting
4.10 Documented testing procedures
4.11 Disaster recovery
4.12 Media context discrepancies

5 Data management

5.1 Data security
5.2 Authentication
5.3 Privilege
5.4 Traceability
5.5 Activity Log
5.6 Repository security structure
5.7 Failsafe procedures
5.8 Access and distribution restrictions
5.9 Data content
5.10 File formats / application association
5.11 Multiple file formats of same design
5.12 Variety of types of data objects
5.13 Unique persistent identifier of identification scheme
5.14 Relationships between data objects
5.15 Capture derivative relationships between part designs
5.16 Capture standards metadata
5.17 Unambiguous product definition
5.18 Extensibility
5.19 Links with documents of existing archive systems

5.20 Associated non-product data
5.21 Data integrity
5.22 Descriptions of key performance indicators
5.23 Stored media error detection
5.24 Media refresh
5.25 Design intent integrity
5.26 Storage and retrieval integrity
5.27 Integrity of the data over the entire product / data life cycle
5.28 Migration of conversion of data representations
5.29 Multi-Level architecture
5.30 Audit trail
5.31 Provenance
5.32 Usability after translation
5.33 Description of format and representation
5.34 Core attributes
5.35 Management of descriptive information

6 Administration

6.1 Negotiation of agreements between the producer and the archive
6.2 Configuration management system
6.3 Regulatory and contractual requirements
6.4 Coordination with regulatory agencies
6.5 Contractual requirements

7 Preservation Planning

7.1 Risk management
7.2 Data recovery contingency plan
7.3 Data preservation with external producers
7.4 Inherited product data
7.5 Plan for technology evolution
7.6 Usability planning
7.7 Periodic assessment
7.8 Technology replacement

7.9 Access service presentation

7.10 Minimum access requirements

7.11 Incorporate recommendations

8 Access

8.1 Data retrieval and navigation

8.2 Data retrieval

8.3 Retrieval and navigation maintenance

8.4 Interrogation

8.5 Translation accuracy

8.6 Verification

8.7 Validation properties

8.8 Error detection

8.9 Usability issues

8.10 Proprietary rights identification

EN 9300-100: CAD 3D mechanical

1.1 Long term archiving and retrieval of CAD as part of the company risk management 1

1.2 Long term archiving and retrieval of CAD as part of the company risk management 2

1.3 CAD reference model for long term archiving of design intent

1.4 Qualification methods for long term preservation of archived CAD information

1.5 Specific qualification processes for long term archiving of CAD models and associated tolerance thresholds

1.6 Categorization of CAD archived files according to a risk management analysis 1

1.7 Categorization of CAD archived files according to a risk management analysis 2

1.8 Categorization of CAD archived files according to a risk management analysis 3

1.9 Repair in case of identification of errors after retrieval 1

1.10 Repair in case of identification of errors after retrieval 2

1.11 Preservation planning of archived CAD information

1.12 Evolution of ISO standards of the related relevant recommended practices

1.13 Administration and monitoring

1.14 Preservation description information 1

1.15 Preservation description information 2

1.16 Preservation description information 3

1.17 Preservation description information 4

1.18 Preservation description information 5

1.19 Preservation description information 6

EN 9300-110: Explicit geometry information

1.1 Definition of core model for an explicit geometry

1.2 Verification rules of explicit geometry

1.3 Level of verification 1

1.4 Level of verification 2

1.5 Verification rules

1.6 Evaluation of the values of thresholds 1

1.7 Evaluation of the values of thresholds 2

1.8 Evaluation of the values of thresholds 3

1.9 Results of the verification 1

1.10 Results of the verification 2

1.11 Verification reports

1.12 Level of validation 1

1.13 Level of validation 2

1.14 Comparison of the geometrical validation properties 1

1.15 Comparison of the geometrical validation properties 2

1.16 Comparison of the geometrical validation properties 3

1.17 Results of the validation 1

1.18 Results of the validation 2

1.19 Results of the validation 3

EN 9300-115: Explicit CAD assembly structure

1.1 Verification rules of CAD explicit assembly structure

1.2 Validation rules of CAD explicit assembly structure

1.3 Identification of the validation level in AIP

1.4 Identification of the validation level in DIP

EN 9300-120: CAD 3D explicit geometry with product and manufacturing information

1.1 Saved views

1.2 Associativity between the shape and PMI 1

1.3 Associativity between the shape and PMI 2

1.4 Definition of core model for PMI

1.5 Verification rules for PMI

1.6 Validation rules GD&T and annotation

1.7 Levels of validation 1

1.8 Levels of validation 2

1.9 Comparison of the PMI validation properties (PMIVP) 1

1.10 Comparison of the PMI validation properties (PMIVP) 2

1.11 Results of the validation at the ingest process (qualify)

1.12 Results of the validation at the retrieval process (comparison)

1.13 Validation reports