

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

AIRINA

fulfils all applicable requirements of the criteria for document management solutions

AC-DMS, 5th edition 2019 and 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 with the ID 9972.23 and consists of 13 pages.

Essen, 2023-07-28

Dr. Christoph Sutter, Head of Certification Body

TÜV Informationstechnik GmbH Am TÜV1 • 45307 Essen, Germany tuvit.de



Certifcate validity: 2023-07-28 - 2026-07-30





To Certificate

TUVNORDGROUP

Certification scheme

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

 German document: "Zertifizierungsprogramm (nicht akkreditierter Bereich) der Zertifizierungsstelle der TÜV Informationstechnik GmbH", Version 1.1 vom 01.03.2020, TÜV Informationstechnik GmbH

Evaluation report

 "Evaluation Report – Re-Certification – AC-DMS, document management- and archiving solution, AIRINA", version 1.0 as of 2023-07-26, TÜV Informationstechnik GmbH

Evaluation requirements

 "VOI AC-DMS IT Compliance and Information Security – 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.

Certification target

- "AIRINA"
- "Procedural documentation AIRINA Airbus Enterprise Information Archive", version 2.0 as of 2023-04-17, AIRBUS S.A.S.

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 requirements

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 system 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

Appendix to the certificate with the ID 9972.23 page 3 of 13

- 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

Appendix to the certificate with the ID 9972.23 page 5 of 13

- 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

Appendix to the certificate with the ID 9972.23 page 7 of 13

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

Appendix to the certificate with the ID 9972.23 page 10 of 13

- 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 Long term archiving and retrieval of CAD as part of the company risk management 3
- 1.4 CAD reference model for long term archiving of design intent
- 1.5 Qualification methods for long term preservation of archived CAD information
- 1.6 Specific qualification processes for long term archiving of CAD models and associated tolerance thresholds

- 1.7 Categorization of CAD archived files according to a risk management analysis 1
- 1.8 Categorization of CAD archived files according to a risk management analysis 2
- 1.9 Categorization of CAD archived files according to a risk management analysis 3
- 1.10 Repair in case of identification of errors after retrieval 1
- 1.11 Repair in case of identification of errors after retrieval 2
- 1.12 Preservation planning of archived CAD information
- 1.13 Evolution of ISO standards of the related relevant recommended practices
- 1.14 Administration and monitoring
- 1.15 Preservation description information 1
- 1.16 Preservation description information 2
- 1.17 Preservation description information 3
- 1.18 Preservation description information 4
- 1.19 Preservation description information 5
- 1.20 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 Status information
- 1.12 Verification reports
- 1.13 Level of validation 1
- 1.14 Level of validation 2
- 1.15 Comparison of the geometrical validation properties 1
- 1.16 Comparison of the geometrical validation properties 2
- 1.17 Comparison of the geometrical validation properties 3
- 1.18 Results of the validation 1
- 1.19 Results of the validation 2
- 1.20 Results of the validation 3
- 1.21 Results of the validation 4

EN 9300-115: Explicit CAD assembly structure

- 1.1 Definition of verification level
- 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 PMI1
- 1.3 Associativity between the shape and PMI 2

Appendix to the certificate with the ID 9972.23 page 13 of 13

- 1.4 Definition of core model for PMI
- 1.5 Verification rules for PMI
- 1.6 Validation rules of geometric dimensioning & tolerancing 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 Status information
- 1.14 Validation reports