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**Luft- und Raumfahrt –
Digitale Konformitätsbescheinigung (e-CoC) –
Anforderungen, Gestaltung und Aufbau;
Text Englisch**

Aerospace series –
Digital Certificate of Conformity (e-CoC) –
Requirements, design and structure;
Text in English

Série aérospatiale –
Certificat numérique de conformité (e-CoC) –
Exigences, conception et structure;
Texte en anglais

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Foreword

This DIN SPEC has been developed according to the PAS procedure. The development of a DIN SPEC according to the PAS procedure is carried out in DIN SPEC (PAS)-consortiums and does not require with the participation of all stakeholders.

This document has been prepared and adopted by the initiators and authors named below:

- Airbus Operations GmbH, 28199 Bremen, Germany
Ralf Schomaker
- Airbus S.A.S, Toulouse, France
Giovanni David
- Aircraft Philipp Group, D-83236 Übersee, Germany
Dipl. Ing. (FH) Joachim Schardt
- ALA Germany GmbH, 92318 Neumarkt, Germany
Bill Holler, Andrea Bellotti
- AMAG, 5282 Braunau-Ranshofen, Austria
Dr. Werner Aumayr
- Biersack Aerospace GmbH, 92339 Beilngries, Germany
Stefan Liebl
- Cotesa GmbH, 09648 Mittweida, Germany
Dr. Jakob Schulz
- Matplus GmbH, 42103 Wuppertal, Germany
Dr. Ing. Uwe Diekmann
- Otto Fuchs KG, 58540 Meinerzhagen, Germany
Dr. Ing. Bernd Koch
- WMH Group Germany, 45141 Essen, Germany
Frank Hermann

At present, there are no standards covering this topic in the body of German Standards.

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A draft of this DIN SPEC (PAS) has not been published.

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Introduction

This DIN specification (DIN SPEC) was drawn up by a consortium of companies from the aviation industry.

With this DIN SPEC 9012, the project partners have developed a digital data exchange format for the quality certification documents.

Website <https://e-coc.org>

This DIN SPEC 9012 contains additional information which might be impractical to be detailed by a printed document only. Therefore, it is linked to the interactive website <https://e-coc.org> (Figure 1). For the full content both — the printed DIN SPEC and the website — have to be taken into consideration.



Figure 1 — Website <https://e-coc.org>

DIN SPEC 9012 contains:

- description of the process and the requirements of CoC and certificate documents;
- description of the principles of the use of e-CoC;
- basic description of the structure of the data format.

The website contains the following data and information:

- general description of the purpose and the use of e-CoC;
- e-CoC JSON schema for download;
- use cases with detailed description of the data structure and sample files for download;

- detailed data format description;
- JSON schema for advanced data exchange;
- e-CoC Generator and e-CoC-Reader.

The access to <https://e-coc.org> is free but requires a registration.

Revisions

The JSON schema may be subject to change, depending on the results from initial applications and may be developed further correspondingly.

The documentation and JSON schema on the website <https://e-coc.org> can be updated without changing the DIN SPEC document. To ensure the reference to DIN SPEC 9012 and future derived standardised references, the first instance in the relevant standard document is specified. The revisions will be versioned in the second instance, i.e. 1.0, 1.1 and so on.

The document of DIN SPEC 9012:2020-10 available here represents Version 1.

1 Scope

This document specifies a data exchange format for quality certification documents:

- certificates of conformity (DIN EN ISO/IEC 17050-1, NF L00-015);
- inspection documents (DIN EN 10204);
- additional information (if required, e.g. data from materials testing laboratories).

The e-CoC combines the exchange of documents and data in a consistent manner.

In the aviation industry, all source materials, parts, components and processes are completely traceable. This traceability is currently ensured by paper documents, the so-called “Certificates of Conformity (CoC)” and if necessary, inspection documents. These are mandatory in the supply chain. These documents shall be available throughout the total lifetime of the final product.

A standardized data exchange format can greatly simplify this process.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

DIN EN 10204:2005-01, *Metallic products — Types of inspection documents; German version EN 10204:2004*

DIN EN ISO/IEC 17050-1, *Conformity assessment — Supplier’s declaration of conformity — Part 1: General requirements*

JSON Schema Definition, <https://json-schema.org/>

NF L00-015, *Aerospace — Quality management and assurance — Statement of conformity*

RFC 4122, *A Universally Unique Identifier (UUID) URN Namespace*, available at <https://tools.ietf.org/html/rfc4122>

3 Terms and definitions and abbreviated terms

For the purposes of this document, the following terms, definitions and abbreviations apply.

DIN and DKE maintain terminological databases for use in standardization at the following addresses:

- DIN-TERMinologieportal: available at <https://www.din.de/go/din-term>
- DKE-IEV: available at <http://www.dke.de/DKE-IEV>