SLOVENSKI STANDARD
SIST EN IEC 62668-1:2020

01-februar-2020

Upravljanje procesov v avioniki - Preprečevanje ponarejanja - 1. del: Izogibanje uporabi ponarejenih, lažnih in recikliranih elektronskih komponent (IEC 62668-1:2019)

Process management for avionics - Counterfeit prevention - Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components (IEC 62668-1:2019)

Luftfahrtelektronik-Prozessmanagement - Verhinderung von Produktfälschung - Teil 1: Vermeidung des Gebrauchs von gefälschten, betrügerischen und wiederverwerteten elektronischen Bauelementen (IEC 62668-1:2019)

Gestion des processus pour l'avionique - Prévention de la contrefaçon - Partie 1: Prévention de l'utilisation de composants électroniques contrefaits, frauduleux et recyclés (IEC 62668-1:2019)

Ta slovenski standard je istoveten z: **EN IEC 62668-1:2019**

ICS:

03.100.50	Proizvodnja. Vodenje proizvodnje	Production. Production management
31.020	Elektronske komponente na splošno	Electronic components in general
49.020	Letala in vesoljska vozila na splošno	Aircraft and space vehicles in general

SIST EN IEC 62668-1:2020 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 62668-1

November 2019

ICS 03.100.50; 31.020; 49.060

English Version

Process management for avionics - Counterfeit prevention - Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components (IEC 62668-1:2019)

Gestion des processus pour l'avionique - Prévention de la contrefaçon - Partie 1: Prévention de l'utilisation de composants électroniques contrefaits, frauduleux et recyclés (IEC 62668-1:2019)

Luftfahrtelektronik-Prozessmanagement - Verhinderung von Produktfälschung - Teil 1: Vermeidung des Gebrauchs von gefälschten, betrügerischen und wiederverwerteten elektronischen Bauelementen (IEC 62668-1:2019)

This European Standard was approved by CENELEC on 2019-10-21. CENELEC 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 CENELEC 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 CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document 107/335/CDV, future edition 1 of IEC 62668-1, prepared by IEC/TC 107 "Process management for avionics" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62668-1:2019.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2020-07-21
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-10-21

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

Endorsement notice

The text of the International Standard IEC 62668-1:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following note has to be added for the standard indicated:

ISO 14001	NOTE	Harmonized as EN ISO 14001

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 62239-1	-	Process management for avionics - Management plan - Part 1: Preparation and maintenance of an electronic components management plan	EN IEC 62239-1	-
IEC 62668-2	-	Process management for avionics - Counterfeit prevention - Part 2: Managing electronic components from non-franchised sources	EN IEC 62668-2	-
ISO 9001	-	Quality management systems – Requirements	EN ISO 9001	-
-	-	Quality Management Systems – Requirements for Aviation, Space and Defense Organizations	AS/EN/JISQ 9100	-
-	-	Quality Maintenance Systems – Aerospace – Requirements for Maintenance Organizations	AS/EN/JISQ 9110	-

IEC 62668-1

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

Process management for avionics – Counterfeit prevention – Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components

Gestion des processus pour l'avionique – Prévention de la contrefaçon – Partie 1: Prévention de l'utilisation de composants électroniques contrefaits, frauduleux et recyclés

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

PROCESS MANAGEMENT FOR AVIONICS – COUNTERFEIT PREVENTION –

Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components

FOREWORD

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

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International Standard IEC 62668-1 has been prepared by IEC technical committee 107: Process management for avionics.

This first edition cancels and replaces the third edition of IEC TS 62668-1 published in 2016. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

a) added a reference to AS/EN/JISQ 9100 and AS/EN/JISQ 9110 which contain anti-counterfeit requirements which may be used to satisfy the requirements of 4.2;

b) added reference to USA DFAR rule 252.246.7008 and to UK Defence Standard 05-135;

c) added reference to more GAO, OECD and ICC reports in 4.5.1;

d) updated weblinks and other references;

e) added new Annex E with figures describing how anti-counterfeit documents can be used in supply chains;

f) added a reference to the new IECQ OD 3702 traceability audit;

g) added new definition for re-manufactured components with a warning that these are not recommended.

The text of this International Standard is based on the following documents:

CDV	Report on voting
107/335/CDV	107/346A/RVC

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 62668 series, published under the general title *Process management for avionics – Counterfeit prevention*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

PROCESS MANAGEMENT FOR AVIONICS – COUNTERFEIT PREVENTION –

Part 1: Avoiding the use of counterfeit, fraudulent and recycled electronic components

1 Scope

This part of IEC 62668 defines requirements for avoiding the use of counterfeit, recycled and fraudulent components used in the aerospace, defence and high performance (ADHP) industries. It also defines requirements for ADHP industries to maintain their intellectual property (IP) for all of their products and services. The risks associated with purchasing components outside of franchised distributor networks are considered in IEC 62668-2. Although developed for the avionics industry, this document can be applied by other high performance and high reliability industries at their discretion.

NOTE IEC 62668 (all parts) does not address the restriction on the re-use of a component in maintenance, repair and overhaul (MRO) operations and only addresses MRO activities when they are under the OEM's responsibility.

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.

IEC 62239-1, *Process management for avionics – Management plan – Part 1: Preparation and maintenance of an electronic components management plan*

IEC 62668-2, *Process management for avionics – Counterfeit prevention – Part 2: Managing electronic components from non-franchised sources*

ISO 9001, *Quality management systems – Requirements*

AS/EN/JISQ 9100, *Quality Management Systems – Requirements for Aviation, Space and Defense Organizations*

AS/EN/JISQ 9110, *Quality Maintenance Systems – Aerospace – Requirements for Maintenance Organizations*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1
aftermarket source
reseller which may or may not be under contract with the original component manufacturer (OCM), or is sometimes a component “re-manufacturer”, under contract with the OCM

Note 1 to entry: The reseller accumulates inventories of encapsulated or non-encapsulated (wafer) components whose end of life date has been published by the OCM. These components are then resold at a profit to fill a need within the market for components that have become obsolete.

3.1.2
broker
individual or corporate organization that serves as an intermediary between buyer and seller

Note 1 to entry: In the electronic component sector a broker specifically seeks to supply obsolete or hard to find components in order to turn a profit. To do so it may accumulate an inventory of components considered to be of strategic value or may rely on inventories accumulated by others. The broker operates within a worldwide component exchange network.

3.1.3
COTS product
commercial off-the-shelf product
one or more components, assembled and developed for multiple commercial consumers, whose design and/or configuration is controlled by the manufacturer’s specification or industry standard

Note 1 to entry: COTS products can include electronic components, subassemblies or assemblies, or top level assemblies. Electronic COTS subassemblies or assemblies include circuit card assemblies, power supplies, hard drives, and memory modules. Top-level COTS assemblies include a fully integrated rack of equipment such as raid arrays, file servers to individual switches, routers, personal computers, or similar equipment.

Note 2 to entry: This note applies to the French language only.

3.1.4
counterfeit, verb
action of simulating, reproducing or modifying a material good or its packaging without authorization

Note 1 to entry: It is the practice of producing products which are imitations or are fake goods or services. This activity infringes the intellectual property rights of the original manufacturer and is an illegal act. Counterfeiting generally relates to wilful trademark infringement.

3.1.5
counterfeited component
material good imitating or copying an authentic material good which may be covered by the protection of one or more registered or confidential intellectual property rights

Note 1 to entry: A counterfeited component is one whose identity or pedigree has been altered or misrepresented by its supplier.

Identity = original manufacturer, part number, date code, lot number, testing, inspection, documentation or warranty, etc.

Pedigree = origin, ownership history, storage, handling, physical condition, previous use, etc.

Note 2 to entry: When a material good has no registered or confidential intellectual property rights, then the material good has no intellectual property protection. Examples include situations where the original component manufacturer (OCM) has ceased to trade and has not sold or passed on the intellectual property rights to another entity.

3.1.6
customer device specification
device specification written by a user and agreed by the supplier