



BSI Standards Publication

Aerospace series – Quality Management Systems – Nonconformance Data Definition and Documentation

EUROPEAN STANDARD

EN 9131

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2020

ICS 03.100.70; 03.120.10; 49.020

Supersedes EN 9131:2016

English Version

Aerospace series - Quality Management Systems - Nonconformance Data Definition and Documentation

Série aérospatiale - Systèmes de management de la
qualité - Documentation des non-conformités

Luft- und Raumfahrt - Qualitätsmanagementsysteme -
Nichtkonformitäts-Dokumentation

This European Standard was approved by CEN on 22 December 2019.

CEN 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 CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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



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

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

Contents

| | Page |
|---|------|
| European foreword..... | 3 |
| Rationale..... | 4 |
| Foreword | 4 |
| 1 Scope | 5 |
| 1.1 Application | 5 |
| 1.2 Purpose | 5 |
| 2 Normative references | 5 |
| 3 Terms and definitions | 6 |
| 4 Requirements | 7 |
| 5 Code catalog | 8 |
| 5.1 Nonconformity process codes | 8 |
| 5.2 Nonconformity cause codes..... | 8 |
| 5.3 Nonconformity Corrective Action Codes..... | 8 |
| Annex A (informative) List of nonconformity documentation data (mandatory data fields bolded with *) | 13 |
| Annex B (informative) Nonconformity form (layout example)..... | 18 |
| Bibliography..... | 19 |

European foreword

This document (EN 9131:2020) 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-STAN, 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 January 2021, and conflicting national standards shall be withdrawn at the latest by January 2021.

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

This document supersedes EN 9131:2016.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Rationale

This standard was created to provide for the uniform submittal of nonconformity information for notification and/or approval when contractually invoked at any level or as guidance within the aviation, space, and defense industry. This standard can be invoked as a stand-alone requirement or used in conjunction with 9100-series standards (i.e., EN 9100, EN 9110, EN 9120).

Foreword

To assure customer satisfaction, aviation, space, and defense organizations must provide, and continually improve, safe, reliable products and services that meet or exceed customer and applicable statutory and regulatory requirements. The globalization of the industry, and the resulting diversity of regional and national requirements and expectations, have complicated this objective. Organizations have the challenge of purchasing products and services from external providers throughout the world and at all levels of the supply chain. External providers have the challenge of delivering products and services to multiple customers having varying quality requirements and expectations.

The aviation, space, and defense industry established the International Aerospace Quality Group (IAQG) for the purpose of achieving significant improvements in quality and safety, and reductions in cost, throughout the value stream. This organization includes representation from companies in the Americas, Asia/Pacific, and Europe.

This document standardizes requirements for nonconformity data definition and documentation for the industry. The establishment of common requirements, for use at all levels of the supply-chain by organizations, should result in improved quality and safety, and decreased costs, due to the elimination or reduction of organization-unique requirements and the resultant variation inherent in these multiple expectations.

1 Scope

1.1 Application

This document defines the common nonconformity data definition and documentation that shall be exchanged between an internal/external supplier or sub-tier supplier, and the customer when informing about a nonconformity requiring formal decision. The requirements are applicable, partly or totally, when reporting a product nonconformity to the owner or operator, as user of the end item (e.g., engine, aircraft, spacecraft, helicopter), if specified by contract.

Reporting of nonconformity data, either electronically or conventionally on paper, is subject to the terms and conditions of the contract. This also includes, where applicable, data access under export control regulations.

1.2 Purpose

The process of exchanging, coordinating, and approving nonconformity data via concession or product quality escape varies with the multiple relationships and agreements among all parties concerned. The information provided by this document forms architecture for submitting and managing data that allows for concise and accurate communication using various documented methods. The main objective of this document is to provide the definition of a data set that can be integrated into any form of communication (e.g., electronic data interchange, submission of conventional paper forms).

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.

EN ISO 9000:2015, *Quality management systems — Fundamentals and vocabulary*

EN 9100, *Quality Management Systems — Requirements for Aviation, Space and Defence Organizations*¹

EN 9110, *Quality Management Systems — Requirements for Aviation Maintenance Organizations*¹

EN 9120, *Quality Management Systems — Requirements for Aviation, Space and Defence Distributors*¹

IAQG Supply Chain Management Handbook (SCMH) — <http://www.sae.org/iaqg/>

¹ As developed under the auspice of the IAQG and published by various standards bodies [e.g., AeroSpace and Defense Industries Association – Standardization (ASD-STAN), SAE International, European Committee for Standardization (CEN), Japanese Standards Association (JSA)/Society of Japanese Aerospace Companies (SJAC), Brazilian Association for Technical Norms (ABNT)].

3 Terms and definitions

Definitions for general terms can be found in EN ISO 9000 and the IAQG International Dictionary (located on the IAQG website).

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:

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

3.1 customer

recipient of a product provided by an internal/external supplier or sub-tier supplier

3.2 mandatory data

common and transferable data systematically filled in and provided; if printed, this field shall be included on the printed form

3.3 optional data

all data fields that are not defined as mandatory by this standard; these fields may be requested by a customer or needed by the originator for their own purposes

3.4 product

output of an organization that can be produced without any transaction taking place between the organization and the customer

Note 1 to entry: Production of a product is achieved without any transaction necessarily taking place between provider and customer, but can often involve this service element upon its delivery to the customer.

Note 2 to entry: The dominant element of a product is that it is generally tangible.

Note 3 to entry: Hardware is tangible and its amount is a countable characteristic (e.g. tyres). Processed materials are tangible and their amount is a continuous characteristic (e.g. fuel and soft drinks). Hardware and processed materials are often referred to as goods. Software consists of information regardless of delivery medium (e.g. computer programme, mobile phone app, instruction manual, dictionary content, musical composition copyright, driver's license).

EXAMPLE vehicle, engine, equipment, component, deliverable software, or parts and materials thereof

[SOURCE: EN ISO 9000:2015, 3.7.6 – modified: numbering in brackets removed, example added]

3.5 product quality escape

any product released by an internal/external supplier or sub-tier supplier, that is subsequently determined to have one or more nonconformities to contract and/or product specification requirements, that have not been positively dispositioned prior to delivery

3.6

concession

documented authorization from the customer to the internal/external supplier to use or release a product which does not conform to the specified requirements

Note 1 to entry: Concession and product quality escape differ with respect to the point in time when a nonconformity is detected during the product life cycle. Concession is evident before delivery to the customer, while a product quality escape is identified after delivery to the customer.

4 Requirements

4.1 Data related to the description of a nonconformity (i.e., content, format, size) shall be in accordance with the complete set defined in Annex A and the contractual requirements.

- a) Mandatory data fields, identified in bold text and marked with an asterisk(*) shall be systematically recorded and reported to the customer.
- b) Optional data fields shall be recorded, when required, provided that it is not in contradiction with contractual requirements.

NOTE 1 Any data field, whether mandatory or optional data, recorded and reported to the customer that is not applicable shall have N/A entered in the field, prior to final approval/signature.

NOTE 2 Customers may require different optional data fields be recorded and reported. It is therefore recommended that the Information Technology System be capable of defining optional data fields and/or inactivating data fields based on each customer's recording/reporting requirements. This includes the capability of the Information Technology System to process with data types and data sizes specified in this standard.

NOTE 3 While this standard provides requirements that cover the development of forms or electronic systems, exceptions for use of the form or system are allowed as permitted by the customer. For example, where a process batch containing multiple part numbers is to be dispositioned together, the first part number and associated fields would be on the form and additional part numbers and those fields could be on an attachment (see 4.3).

4.2 The entities responsible for entering and approving/acknowledging nonconformity data (in particular disposition, category/classification of the nonconformity, and associated limitations) shall respond in accordance with the terms and conditions of the contractual or regulatory requirements.

4.3 Attached files should be in a protected format (e.g., pdf, tif, jpg), whenever possible. Where this is not practical, appropriate precautions shall be taken to prevent inadvertent changes to the attachments.

4.4 Where file sizes are constrained, a file size optimization tool should be used. If file compression is not capable of meeting file size constraints, the data exchange shall be agreed upon between both parties (e.g., via compact disk, USB flash drive, e-mail correspondence, direct access to data system).

4.5 When the description of a nonconformity is not required in an electronic format and/or is required as a printout, it shall be in a format similar to the example depicted in Annex B; however, the size and order of the fields may be changed to suit the individual application provided that

- a) the contents of the boxes specified in this standard are maintained; alternatively a cross reference can be used,
- b) the form is identified as a nonconformity record and
- c) it complies with contractual/regulatory requirements.

4.6 When required, continuation/additional sheets and attachments shall include the same reference number as the original document.

NOTE Reference Annex A, the data fields ‘Nonconformity Description’ (see No.19) and ‘Disposition’ (see No. 25) may be presented either as a summary or in a clearly defined sub-structure (see No. 19 a-i and No. 25 a-e).

4.7 The forms may be pre-printed, computer generated, or accessed via a net-based system (intranet/internet), but in all cases, the printing of lines and characters shall be clear and legible. The details entered on the forms shall preferably be machine/computer printed, but may be handwritten as long as upper case letters are used and the document remains legible.

NOTE The use of abbreviations should be kept at a minimum.

4.8 The information shall be in English, but other languages may be acceptable (e.g., bilingual: English and native) when specified in the contract.

NOTE The use of abbreviations should be kept to a minimum.

5 Code catalog

The following codes are recommended for codifying affected processes, causes of process deviations, and corrections made to remedy the nonconformity. If codes are defined by a contract and/or the originators already have codes defined that satisfy their needs, these codes shall take precedence over those proposed in the following sections.

NOTE The following codes represent a minimum selection of possible variances. In case of needing additional code definitions (e.g., software, electronic, composites, structures), the tables can be enhanced by using the existing structure.

5.1 Nonconformity process codes

A product nonconformity is typically associated with a process deviation. See Table 1 for a list of codes.

5.2 Nonconformity cause codes

The causes of process deviations are defined in Table 2. The categorization of the list is set up to facilitate the use of process improvement tools (e.g., cause and effect diagram). The ‘Main Term’ code can be used as the cause code, if appropriate, or further definition may be provided.

NOTE 1 One or more cause codes may be used to define the cause(s) for a product nonconformity.

NOTE 2 The allocation of a cause code could be either apparent (preliminary/initial) or final, depending on the status of root cause analysis. For further support, see EN 9136 and the SCMh (“Root Cause Analysis and Problem Solving” chapter).

5.3 Nonconformity Corrective Action Codes

Common corrective action codes are defined in Table 3; intended to correspond directly to the cause codes identified in Table 2, as appropriate.

NOTE One or more corrective action codes may be used to define the corrective action(s) taken for a product nonconformity/cause code.

Table 1 — Nonconformity Process Codes

| Main term | Process Code | Definition/description |
|----------------------------------|--------------|----------------------------|
| P1 – Shipping and Transportation | P11 | Shipping |
| | P12 | Transportation |
| | P13 | Order Preparation |
| | P14 | Preparation of Packaging |
| | P15 | Packaging |
| P2 – Manufacturing | P201 | Assembly |
| | P202 | Test |
| | P203 | Balancing |
| | P204 | Benching |
| | P205 | Blasting |
| | P206 | Bonding |
| | P207 | Brazing |
| | P208 | Broaching |
| | P209 | Casting |
| | P210 | Cleaning |
| | P211 | Coating |
| | P212 | Composite Manufacturing |
| | P213 | Crimping |
| | P214 | Deburring |
| | P215 | Drilling |
| | P216 | Electrochemical Processing |
| | P217 | Etching |
| | P218 | Forging |
| | P219 | Forming |
| | P220 | Grinding |
| | P221 | Heat Treatment |
| | P222 | Precision Hole Making |
| | P223 | Honing and Lapping |
| | P224 | Hot Isostatic Pressing |
| | P225 | Inspection |
| | P226 | Machining |
| | P227 | Marking |

| Main term | Process Code | Definition/description |
|---------------------------|--------------|------------------------|
| | P228 | Melting |
| | P229 | Milling |
| | P230 | Molding |
| | P231 | Painting |
| | P232 | Peening |
| | P233 | Plating |
| | P234 | Polishing |
| | P235 | Riveting |
| | P236 | Rolling / Pressing |
| | P237 | Soldering |
| | P238 | Stamping |
| | P239 | Surface Treatment |
| | P240 | Turning |
| | P241 | Welding |
| | P242 | Additive Manufacturing |
| P3 – Document Preparation | P31 | Documentation Error |
| | P32 | Incomplete |

Table 2 — Nonconformity Cause Codes

| Main term | Cause Code | Definition/description |
|--|------------|--|
| C1 – Machine (Machine and Equipment) | C11 | Machine or equipment related |
| | C12 | Fixture related |
| | C13 | Tool related |
| C2 – Management (Quality Management System, Planning, Education/Training) | C21 | Training was insufficient or inadequate |
| | C22 | Responsibilities not defined or not understood |
| | C23 | Resources competencies were inadequate |
| | C24 | Communication issues (e.g., shift hand over between operators) |
| | C25 | Planning and controls were insufficient |
| | C26 | Instructions or requirements were insufficient or inadequate |

| Main term | Cause Code | Definition/description |
|--|------------|--|
| C3 – People (Employees) | C31 | Instruction or requirements were not followed |
| | C32 | Wrong decision was made |
| | C33 | A reading error was made |
| | C34 | Material handling error |
| | C35 | Known defect or issue not reported or inadequately reported |
| C4 – Material (Material/Product Conditions) | C41 | Material did not comply with specification |
| | C42 | Material shelf life expired |
| | C43 | Contamination of product or raw material |
| C5 – Method (Method and Processes) | C51 | Validation of process was insufficient |
| | C52 | Manufacturing process capability was insufficient or inadequate |
| | C53 | Packaging, labelling, or identification of material was inadequate |
| | C54 | Design process was inadequate (e.g., design standards) |
| | C55 | Procedure/work instruction is not clear; contains errors or is missing |
| C6 – Environment (Temperature, Electricity, External Influence) | C61 | Natural disaster (e.g., earthquake, flood) |
| | C62 | Information technology system failure |
| | C63 | Fire or power outage |
| | C64 | Unpredictable event (e.g., theft, sabotage) |
| | C65 | Environmental conditions were inadequate (e.g., climate) |
| | C66 | Lighting conditions were inadequate |
| | C67 | Ergonomic conditions were poor (e.g., unsuitable equipment set-up) |
| C7 – Measurement (Equipment and Control of Parameters) | C71 | Inspection tool inadequate (e.g., insufficient accuracy) |
| | C72 | Uncalibrated inspection tool used |
| | C73 | Calibration error |
| | C74 | Instruments, displays, or controls were inadequate |
| | C75 | Transcription error while recording result |
| | C76 | Verification method (i.e., inspection, sampling) was inadequate |
| | C77 | Inspection criteria was inappropriate or unclear |

Table 3 — Nonconformity Corrective Action Codes

| Main term | Corrective Action Code | Definition/description |
|------------------|------------------------|--|
| A1 – Machine | A11 | Machine or equipment corrected |
| | A12 | Fixture corrected |
| | A13 | Tool corrected |
| A2 – Management | A21 | Training provided |
| | A22 | Responsibilities defined and communicated |
| | A23 | Appropriate resources provided |
| | A24 | Communication improved |
| | A25 | Planning and controls improved |
| | A26 | Instructions and requirements corrected |
| A3 – People | A31 | Training performed |
| | A32 | Instructions or requirements updated and highlighted to staff |
| | A33 | Handling process and instructions improved |
| | A34 | No action |
| A4 – Material | A41 | Material ordering process and rules reviewed |
| | A42 | Life limited product related processes and rules updated/applied |
| A5 – Method | A51 | Process validation improved |
| | A52 | Process capability reviewed and improvement implemented |
| | A53 | Packing labelling and identification process and rules corrected |
| | A54 | Design process improved |
| | A55 | Procedure/work instruction corrected or newly issued |
| A6 – Environment | A61 | No action |
| | A62 | Information technology system improved |
| | A63 | Environmental conditions improved |
| | A64 | Lighting improved |
| | A65 | Ergonomic conditions improved |
| A7 – Measurement | A71 | Inspection tool corrected |
| | A72 | Inspection tool calibrated |
| | A73 | Instruments, displays, and controls corrected |
| | A74 | Verification methods improved |
| | A75 | Inspection criteria and process corrected |

Prepared by the international Aerospace Quality group (IAQG).

Annex A
(informative)

List of nonconformity documentation data (mandatory data fields bolded with *)

| No. | Data Field Title | Description | Data | Data Type | Data Size (in digits) | Comments |
|------------------------------------|---------------------|---|--|---------------|-------------------------|---|
| DOCUMENT IDENTIFICATION | | | | | | |
| 1 | Document Ref. No. * | Unique reference number assigned by the originator | Numerals/letters | Alpha-numeric | 4 minimum 20 maximum | In accordance with contractual requirements |
| 2 | Customer Ref. No. | Customer or Partner specific number | Numerals/letters | Alpha-numeric | 4 minimum 20 maximum | Identify, if different from field number 1 |
| 3 | Customer's Company | Identification of customer | Customer code | Alpha-numeric | 50 maximum | Name or code number |
| 4 | Revision/Issue * | Document issue or level of document revision | Numerals/letters | Alpha-numeric | 1 minimum 10 maximum | First issue can be " _ " (contracted with Customer) |
| 5 | Page of Pages * | Sheet number and total number of sheets (paper form) | Number of line items | Numeric | 1 minimum 6 maximum | Pagination for printouts |
| IDENTIFICATION OF PRODUCT AFFECTED | | | | | | |
| 6 | Program | Name/title of program, project, or model | Numerals/letters | Alpha-numeric | 50 maximum | |
| 7 | Part No. * | Lowest level part number containing the nonconformity | Number identified in the drawing or contract | Alpha-numeric | 1 minimum 25 maximum | If known by supplier. Only one part number allowed. |
| 7a | Other Part No. | Lowest level part number containing the nonconformity | Part number or code assigned by the customer or supplier | Alpha-numeric | 1 minimum 25 maximum | If different from field number 9 and according to contract requirements |
| 8 | Part Name * | Part/product description | Nomenclature | Alpha-numeric | 2 minimum 50 maximum | |

| No. | Data Field Title | Description | Data | Data Type | Data Size (in digits) | Comments |
|--|--------------------------------|--|--------------------------------|---------------|-------------------------|--|
| 9 | S/N or ID No. * | Part serial number, batch number, lot number, identification number | Numerals/letters | Alpha-numeric | 1 minimum 25 maximum | If multiple units of the same part number are affected, all unique numbers shall be listed |
| 10 | NC Qty. * | Quantity of affected parts | Number of non-conforming parts | Numeric | 1 minimum 10 maximum | |
| 11 | Order Qty. | Total quantity of ordered parts | Number of total order | Numeric | 1 minimum 10 maximum | Actual order or lot size |
| 12 | Work/Purchase/Order No. | Internal order number | Number on order | Alpha-numeric | 2 minimum 15 maximum | |
| 13 | Dwg. No./Issue | Drawing number and issue | Supplier Code | Alpha-numeric | 2 minimum 50 maximum | |
| 14 | LRU or Sub-assembly Name/Ref. | Lowest Line Replaceable Unit (LRU) or sub-assembly containing the nonconforming part | Number or name | Alpha-numeric | 50 maximum | |
| 15 | LRU or Sub-assembly S/N | Lowest LRU or sub-assembly serial number | Customer Code | Alpha-numeric | 1 minimum 50 maximum | |
| 16 | Final Product Manufacturer S/N | Highest assembly part S/N (e.g., engine, aircraft, spacecraft) | Numerals/letters | Alpha-numeric | 1 minimum 25 maximum | |
| 17 | Product Category | Product engineering classification (production, development/test) | Numerals/letters | Alpha-numeric | 1 minimum 8 maximum | In accordance with contractual requirements |
| 18 | ATA Chapter | Air Transport Association (ATA) chapter for equipment | Numerals/letters | Alpha-numeric | 1 minimum 8 maximum | In accordance with contractual requirements |
| DESCRIPTION OF NONCONFORMITY ... All nonconformities (on one or several parts of the same part number) shall be described as a separate line item. | | | | | | |
| 19 | Nonconformity Description * | Text description (e.g., attribute characteristics) | Numerals/letters | Alpha-numeric | 4 000 maximum | Additional information not contained in other data boxes below |
| 19a | Document Reference | Reference to number/title of drawing, specification, process sheet, etc. | Numerals/letters | Alpha-numeric | 2 minimum 25 maximum | Requirements |
| 19b | Index | Applicable document revision, in accordance with contract | Numerals/letters | Alpha-numeric | 1 minimum 3 maximum | |

| No. | Data Field Title | Description | Data | Data Type | Data Size (in digits) | Comments |
|--|------------------------|--|------------------|---------------|-------------------------|---|
| 19c | Previous Dispositions | Reference to previous dispositions (concessions) for the same part number | Numerals/letters | Alpha-numeric | 1 minimum 15 maximum | Recurrence of nonconformity; previous cases of the same condition affecting other parts |
| 19d | Zone | Sheet/zone of drawing or specification chapter | Numerals/letters | Alpha-numeric | 1 minimum 4 maximum | |
| 19e | KC | Key product or process characteristic | Numerals/letters | Alpha-numeric | 1 minimum 8 maximum | If defined on the customer design/drawing |
| 19f | Char. Item No. | Item number on drawing | Numerals/letters | Alpha-numeric | 1 minimum 5 maximum | As identified on the drawing by balloon or item number |
| 19g | Specified Requirement | Required dimension, including tolerance | Numerals/letters | Alpha-numeric | 1 minimum 22 maximum | |
| 19h | Actual Condition | Dimension plus unit | Numerals/letters | Alpha-numeric | 2 minimum 22 maximum | |
| 19i | Over Max. / Under Min. | Value in relation to the specified value | Numerals/letters | Alpha-numeric | 2 minimum 10 maximum | |
| 20 | Attachment | Yes/No or number of pages/files (e.g., sketch, calculation note) | Numerals/letters | Alpha-numeric | 2 minimum 20 maximum | Requirements defined in Clause 4 of standard |
| 21 | Process Code | Reference to applicable codes | Numerals/letters | Alpha-numeric | 2 minimum 20 maximum | See Table 1, “Nonconformity Process Codes” |
| 22 | Supplier Remarks | Description of the recommended disposition, nonconformity category, proposed rework solution, etc.; provided by supplier | Numerals/letters | Alpha-numeric | 2 000 maximum | |
| DESCRIPTION OF CAUSE/CORRECTIVE ACTION | | | | | | |
| 23 | Cause Code | Cause code or information about cause of nonconformity | Numerals/letters | Alpha-numeric | 2 minimum 20 maximum | See Table 2, “Nonconformity Cause Codes” |
| 24 | Corr. Action Code | Immediate and/or long-term corrective action, or log number that references corrective action form | Numerals/letters | Alpha-numeric | 2 minimum 20 maximum | See Table 3, “Nonconformity Corrective Action Codes” |

| No. | Data Field Title | Description | Data | Data Type | Data Size (in digits) | Comments |
|--|-----------------------------|--|---|---------------|-------------------------|---|
| DISPOSITION OF NONCONFORMITY ... Each nonconformity identified shall be dispositioned. | | | | | | |
| 25 | Disposition * | Decision by material review board, design office, quality department, etc. | Numerals/letters | Alpha-numeric | 2 000 maximum | For each nonconformity per affected part (e.g., several S/Ns affected) |
| 25a | NC Category | Classification of the nonconformity (e.g., major/minor, I/II/III) | Numerals/letters | Alpha-numeric | 1 minimum 8 maximum | Classification of each non-conformity or complete data set |
| 25b | Limitation | Yes or None (check box) | Numerals/letters | Alpha | 1 minimum 3 maximum | |
| 25c | Limitation Description | Description of limitation imposed on part | Numerals/letters | Alpha-numeric | 400 maximum | For example: limited flight hours or use limitations |
| 25d | Part Marking | Number or code to be marked on the part | Numerals/letters | Alpha-numeric | 1 minimum 10 maximum | |
| 25e | Additional Comments | Explanation, technical background, indication of concession (recordable or not), details of actions, etc. | Numerals/letters | Alpha-numeric | 2 000 maximum | |
| APPROVAL AND ACKNOWLEDGEMENT ... Typically includes signatures of the originator, design/quality personnel approving the disposition, including customer approval/acknowledgement [e.g., government agency, National Aviation Authority (NAA)]. | | | | | | |
| 26 | Originator * | Initiator of the document | Numerals/letters | Alpha-numeric | 30 maximum | Can be combined with 26a, 26b, 26c, and 26d. In paper form only this block is applicable. |
| 26a | Originator's Company Name * | Identification of originator's company name (name or code number as contracted) | Prime Supplier Code | Alpha-numeric | 50 maximum | Information technology specific |
| 26b | Function or Dept. * | Originator's function or department | Numerals/letters | Alpha-numeric | 1 minimum 10 maximum | Information technology specific |
| 26c | Date * | Date of request | Numerals/letters | Date | 6 minimum 10 maximum | Information technology specific |
| 26d | Sign. | Signature of the originator | Digital signature; password may be required | Alpha-numeric | 1 minimum 20 maximum | Information technology specific |
| 27 | Technical Approval | Engineer that provided "Disposition" authorized or responsible experts (e.g., design authority); multiple signatures possible (see No. 25) | Numerals/letters | Alpha-numeric | 30 maximum | Can be combined with 27a, 27b, and 27c. In paper form only this block is applicable. |

| No. | Data Field Title | Description | Data | Data Type | Data Size (in digits) | Comments |
|--|---|--|--|---------------|--------------------------|--|
| 27a | Name, Function, or Dept. | Identify name, function, or department | Numerals/letters | Alpha-numeric | 1 minimum 10 maximum | Information technology specific |
| 27b | Date | Date of approval | Numerals/letters | Date | 6 minimum 10 maximum | Information technology specific |
| 27c | Sign. | Signature of expert | Digital signature; password may be required | Alpha-numeric | 1 minimum 20 maximum | Information technology specific |
| 28 | Customer * | Name of the final approver of the nonconformity in customer organization | Numerals/letters | Alpha-numeric | 30 maximum | Can be combined with 28a, 28b, and 28c. In paper form only this block is applicable. |
| 28a | Function or Dept * | Function or department of final approver | Numerals/letters | Alpha-numeric | 1 minimum 10 maximum | Information technology specific |
| 28b | Date * | Date of approval | Numerals/letters | Date | 6 minimum 10 maximum | Information technology specific |
| 28c | Sign. * | Signature of the customer approver | Digital signature; password may be required | Alpha-numeric | 1 minimum 20 maximum | Information technology specific |
| ADDITIONAL INFORMATION ... Only applicable to product quality escapes. | | | | | | |
| 29 | Notification to Regulatory Agency(ies) | Regulatory agency(ies) notified of product quality escapes | Numerals/letters | Alpha-numeric | 100 maximum | |
| 30 | Availability of Replacement Parts | Date when parts are available | Numerals/letters | Date | 6 minimum 10 maximum | |
| 31 | Availability of Personnel to Perform Work | Date when personnel are available | Numerals/letters | Date | 6 minimum 10 maximum | |
| 32 | In-service Unit(s) Affected | Yes or No (check box) | Numerals/letters | Alpha | 200 maximum | Include unit numbers |
| DISTRIBUTION LIST | | | | | | |
| 33 | Distribution | Actual distribution as per approver/customer instructions | Numerals/letters | Alpha-numeric | 1 minimum 100 maximum | |
| 34 | Date | Form date | Numerals/letters | Date | 6 minimum 10 maximum | Revision control of the form |

Annex B
(informative)

Nonconformity form (layout example)

| | | | | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|--|--|--|-----------------------------------|--|-----------------------------------|--|--|--|--|--|-----------------------------------|--|---------------------|--|----------------|--|------------------------|--|----------------------------|--|---------------------------|--|
| Corporate Logo (optional) | | 1 Document Ref. No. * | | 2 Customer Ref. No. | | 3 Customer's Company | | 4 Revision/Issue * | | 5 Page of Pages * | | | | | | | | | | | | | |
| 6 Program | | 7 Part No. * | | 7a Other Part No. | | 8 Part Name * | | 9 S/N or ID No. * | | | | | | | | | | | | | | | |
| 10 NC Qty. * | | 11 Order Qty. | | 12 Work/Purchase/Order No. | | 13 Dwg. No./Issue | | 14 LRU or Sub-assembly Name/Ref. | | 15 LRU or Sub-assembly S/N | | 16 Final Product Manufacturer S/N | | 17 Product Category | | 18 ATA Chapter | | | | | | | |
| 19 Nonconformity Description* | | | | | | | | | | | | | | | | | | 19a Document Reference | | 19b Index | | 19c Previous Dispositions | |
| | | | | | | | | | | | | | | | | | | 19h Actual Condition | | 19i Over Max. / Under Min. | | | |
| 19d Zone | | 19e KC | | 19f Char. Item No. | | 19g Specified Requirement | | 20 Attachment | | | | | | | | | | | | | | | |
| 21 Process Code | | 22 Supplier Remarks | | 23 Cause Code | | 24 Corr. Action Code | | | | | | | | | | | | | | | | | |
| 25 Disposition * | | | | | | | | | | | | | | | | | | | | | | | |
| 25a NC Category | | 25b Limitation Yes <input type="checkbox"/> None <input type="checkbox"/> | | 25c Limitation Description | | 25d Parts Marking | | | | | | | | | | | | | | | | | |
| 25e Additional Comments | | | | | | | | | | | | | | | | | | | | | | | |
| 26 Originator * | | 27 Technical Approval | | Name/Function or Dept./Date/Sign. | | Name/Function or Dept./Date/Sign. | | 29 Notification of Regulatory Agency(ies) | | | | | | | | | | | | | | | |
| Name/Function or Dept./Date/Sign.* | | Name/Function or Dept./Date/Sign. | | Name/Function or Dept./Date/Sign. | | Name/Function or Dept./Date/Sign. | | 30 Availability of Replacement Parts | | | | | | | | | | | | | | | |
| 28 Customer * | | Name/Function or Dept./Date/Sign. | | Name/Function or Dept./Date/Sign. | | Name/Function or Dept./Date/Sign. | | 31 Availability of Personnel to Perform Work | | 32 In-service Unit(s) affected Yes <input type="checkbox"/> No <input type="checkbox"/> | | Unit Number(s) | | | | | | | | | | | |
| Name/Function or Dept./Date/Sign.* | | Name/Function or Dept./Date/Sign. | | Name/Function or Dept./Date/Sign. | | Name/Function or Dept./Date/Sign. | | | | | | | | | | | | | | | | | |
| 33 Distribution | | | | | | | | | | | | | | | | | | 34 Date | | | | | |

Bibliography

EN 9136, *Aerospace series — Root cause analysis and problem solving (9S Methodology)*

British Standards Institution (BSI)

BSI is the national body responsible for preparing British Standards and other standards-related publications, information and services.

BSI is incorporated by Royal Charter. British Standards and other standardization products are published by BSI Standards Limited.

About us

We bring together business, industry, government, consumers, innovators and others to shape their combined experience and expertise into standards-based solutions.

The knowledge embodied in our standards has been carefully assembled in a dependable format and refined through our open consultation process. Organizations of all sizes and across all sectors choose standards to help them achieve their goals.

Information on standards

We can provide you with the knowledge that your organization needs to succeed. Find out more about British Standards by visiting our website at bsigroup.com/standards or contacting our Customer Services team or Knowledge Centre.

Buying standards

You can buy and download PDF versions of BSI publications, including British and adopted European and international standards, through our website at bsigroup.com/shop, where hard copies can also be purchased.

If you need international and foreign standards from other Standards Development Organizations, hard copies can be ordered from our Customer Services team.

Copyright in BSI publications

All the content in BSI publications, including British Standards, is the property of and copyrighted by BSI or some person or entity that owns copyright in the information used (such as the international standardization bodies) and has formally licensed such information to BSI for commercial publication and use.

Save for the provisions below, you may not transfer, share or disseminate any portion of the standard to any other person. You may not adapt, distribute, commercially exploit or publicly display the standard or any portion thereof in any manner whatsoever without BSI's prior written consent.

Storing and using standards

Standards purchased in soft copy format:

- A British Standard purchased in soft copy format is licensed to a sole named user for personal or internal company use only.
- The standard may be stored on more than one device provided that it is accessible by the sole named user only and that only one copy is accessed at any one time.
- A single paper copy may be printed for personal or internal company use only.

Standards purchased in hard copy format:

- A British Standard purchased in hard copy format is for personal or internal company use only.
- It may not be further reproduced – in any format – to create an additional copy. This includes scanning of the document.

If you need more than one copy of the document, or if you wish to share the document on an internal network, you can save money by choosing a subscription product (see 'Subscriptions').

Reproducing extracts

For permission to reproduce content from BSI publications contact the BSI Copyright and Licensing team.

Subscriptions

Our range of subscription services are designed to make using standards easier for you. For further information on our subscription products go to bsigroup.com/subscriptions.

With **British Standards Online (BSOL)** you'll have instant access to over 55,000 British and adopted European and international standards from your desktop. It's available 24/7 and is refreshed daily so you'll always be up to date.

You can keep in touch with standards developments and receive substantial discounts on the purchase price of standards, both in single copy and subscription format, by becoming a **BSI Subscribing Member**.

PLUS is an updating service exclusive to BSI Subscribing Members. You will automatically receive the latest hard copy of your standards when they're revised or replaced.

To find out more about becoming a BSI Subscribing Member and the benefits of membership, please visit bsigroup.com/shop.

With a **Multi-User Network Licence (MUNL)** you are able to host standards publications on your intranet. Licences can cover as few or as many users as you wish. With updates supplied as soon as they're available, you can be sure your documentation is current. For further information, email cservices@bsigroup.com.

Revisions

Our British Standards and other publications are updated by amendment or revision.

We continually improve the quality of our products and services to benefit your business. If you find an inaccuracy or ambiguity within a British Standard or other BSI publication please inform the Knowledge Centre.

Useful Contacts

Customer Services

Tel: +44 345 086 9001

Email: cservices@bsigroup.com

Subscriptions

Tel: +44 345 086 9001

Email: subscriptions@bsigroup.com

Knowledge Centre

Tel: +44 20 8996 7004

Email: knowledgecentre@bsigroup.com

Copyright & Licensing

Tel: +44 20 8996 7070

Email: copyright@bsigroup.com

BSI Group Headquarters

389 Chiswick High Road London W4 4AL UK

