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Conformity assessment — Guidelines and examples of a scheme for the certification of processes

Évaluation de la conformité — Lignes directrices et exemples d'un schéma de certification pour les processus

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Contents

Page

Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see http://patents.iec.ch).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by the ISO Committee on Conformity Assessment (CASCO).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

A process is considered to be a transformation of input into output, as shown in Figure 1. It is a set of interrelated or interacting activities that use inputs to deliver an intended result. The output of a process can be a product, a service, a combination of a product and a service, or another output. In some cases, process certification is used when certification of the output is not feasible or prohibitively expensive. Certification of the process is the only indicator of quality of the output since the output itself is not certified. Schemes for the certification of processes can be developed for different purposes and can ensure the quality of the products or services that the processes produce. Other purposes can include schemes for processes established by regulators to achieve health, safety or environmental outcomes. Certification of processes that are used to develop products and services can facilitate trade, market access, fair competition and customer acceptance at national, regional and international levels.

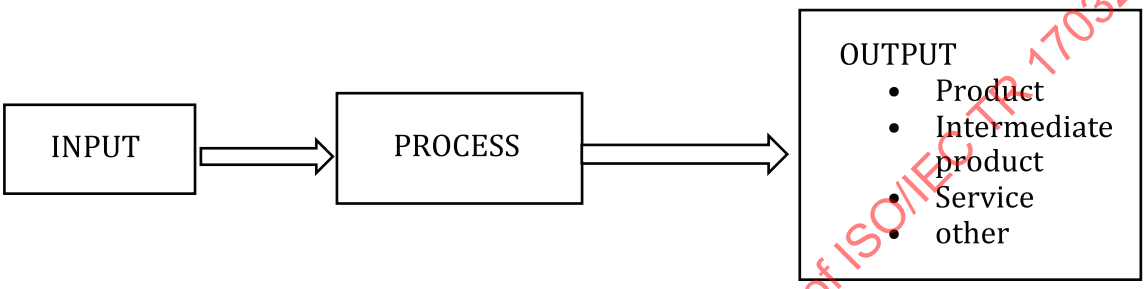

Figure 1 — Schematic representation of the outputs of a process

Processes can be for a specific product or service (e.g. welding, non-destructive testing, heat treatment (annealing), surface treatment) or can include complex systems engineering designs for safety and environmental protection, production of goods and large computer software programs. Other examples of processes are food production, agriculture, supply chain, logistics, construction planning and design, and data security and protection. Annex A provides some examples of processes.

Recently, there has been significant growth in new types of sector specific process certification activities, e.g. for information technology, sustainability, social welfare, blockchain technology, nanotechnology, security systems, food safety, chain of custody, smart cities and smart homes. Certification of these processes in emerging markets is being implemented by conformity assessment bodies to ensure quality of the outcomes. The trend of new processes that are emerging will not stop and they will need to be certified to ensure quality.

This document is intended to provide useful information to those involved in certification on the application of ISO/IEC 17067 for processes. It provides guidance on a type 6 scheme, as outlined in ISO/IEC 17067, related to the certification of processes.

In practice, there are many different ways in which certification of processes is operated. There are other measures that scheme owners, in consultation with other interested parties, can adopt, or use in different combinations, to achieve a fit-for-purpose scheme.

In particular, the range of activities used, and the intensity with which they are applied, need to be proportionate to the consequences and likelihood of a process failing to fulfil specified requirements resulting in faulty products or services. Factors such as the particular characteristics of the marketplace, the technology and methods related to the processes also need to be taken into account.

Management system standards based on a quality management system, e.g. ISO 9001, can optionally be used as a basis for evaluation in the certification of processes as part of a scheme for the certification of processes. Various standards for verification and validation of specific elements of the process are also available for certain processes (e.g. for greenhouse gas emission and software development) that can further ensure the quality of the process outputs.

In the context of this document, the assessment of a management system as part of certification of process does not constitute the certification of the management system.

The principal interested parties, who are most affected by the rules, procedures and management of the scheme, are the following:

— the scheme owner;

— the certification body/bodies;

— the process owner;

— the process operator;

— users of the products and services (outputs) produced by the processes that rely on certification.

NOTE Where a certification body runs its own scheme, the certification body is the scheme owner.

Other interested parties include, but are not limited to:

— regulatory authorities;

— specifiers, purchasers and users of certified processes;

— conformity assessment bodies, such as testing laboratories, validation and verification bodies and inspection bodies, involved in the certification of processes;

— accreditation bodies and peer assessment groups;

— international certification schemes that facilitate the recognition of certification status from one scheme owner to another;

— organizations that endorse and/or benchmark certification schemes

— consumers (users).

This document provides guidelines accompanied by examples that are used to illustrate ways in which the guidelines can be used, without precluding other approaches as decided by the scheme owner in consultation with the other stakeholders.

Conformity assessment — Guidelines and examples of a scheme for the certification of processes

1 Scope

This document provides guidelines, principles and examples of schemes for the certification of processes.

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.

ISO/IEC 17000, *Conformity assessment — Vocabulary and general principles*

ISO/IEC 17065:2012, *Conformity assessment — Requirements for bodies certifying products, processes and services*

ISO/IEC 17067:2013, *Conformity assessment — Fundamentals of product certification and guidelines for product certification schemes*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC 17000, ISO/IEC 17067 and ISO/IEC 17065 apply.

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
process
set of interrelated or interacting activities which transforms inputs into outputs

Note 1 to entry: A process is considered to be the object of conformity assessment by certification.

Note 2 to entry: In this document, a certification process is a set of activities which deliver a certified process.

[SOURCE: ISO/IEC 17065:2012, 3.5, modified — The original Example and Note to entry have been replaced by Notes 1 and 2 to entry.]

3.2
process operator
person or organization that operates the *process* (3.1)

Note 1 to entry: The process operator can be the process owner or can be different, e.g. in franchising.

3.3
process owner
person or organization that defines and owns the *process* (3.1)

4 General description of a scheme for the certification of processes

4.1 Characteristics of process

The process should be established, with clearly defined boundaries and scope, maintained and documented. The process should be repeatable and the output (e.g. service or product) should be consistent.

NOTE Processes can be described in terms of the attributes of process title, process purpose and process outcomes.

4.2 Development and operation of a scheme

4.2.1 General provisions for the development and operation of a scheme for the certification of processes are stipulated in ISO/IEC 17067:2013, Clause 6. This document provides guidance on how those general provisions are implemented in a particular scheme for the certification of processes. Figure 2 provides a schematic representation of the elements of a single process.

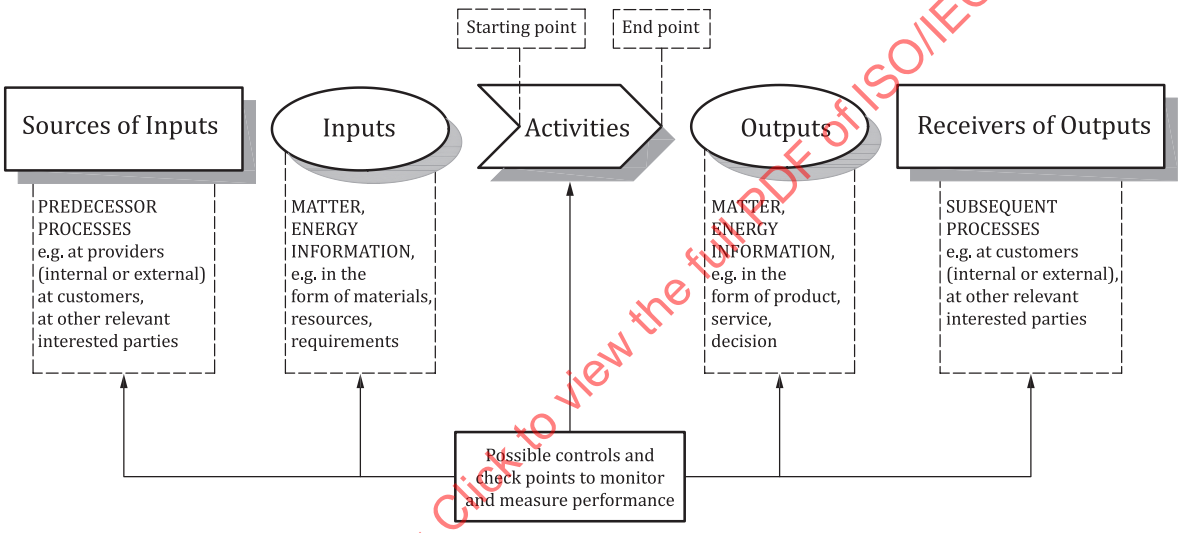

Figure 2 — Schematic representation of the elements of a single process

4.2.2 Schemes for the certification of processes can be developed for different purposes, which can include schemes established by industries, sectors or regulators.

NOTE As an example, the application of conformity assessment methodology to the assessment to process quality characteristics and organizational maturity is described in ISO/IEC 29169.

4.2.3 The main parties involved in the operation of the scheme should be:

a) the scheme owner;

b) the certification body;

c) the organization that owns and/or operates the process being certified and that has an agreement with the certification body (client).

4.3 Outline of a scheme for the certification of processes

4.3.1 Certification of processes

4.3.1.1 Certification of processes is a third-party attestation that fulfilment of specified requirements for a process has been demonstrated. Certification of processes is carried out by certification bodies that should conform to ISO/IEC 17065.

4.3.1.2 Certification of processes is intended to provide confidence to customers, regulators, industry and other interested parties that the organization conducting the process has fulfilled specified process requirements. Specified requirements for processes are generally contained in standards or other normative documents. Certification can apply generally to the process or to specific implementations of the process by an individual or organization. The scheme owner can use a risk-based approach for planning of activities.

4.3.1.3 Certification of processes cover a variety of processes, such as welding, non-destructive testing, system design engineering, heat treatment, production monitoring, food production, agriculture, software development, surface treatment services, supply chain, logistics, construction planning and design, and data protection.

NOTE Annex A provides examples of schemes for the certification of processes.

4.3.2 Functional approach

4.3.2.1 Schemes for the certification of processes should consider the functional approach as described in ISO/IEC 17000. In ISO/IEC 17065, the term "evaluation" is defined as a combination of "selection and determination".

4.3.2.2 The functional approach consists of the following:

— **selection**, which includes planning and preparation activities in order to collect or create all the information and input needed for the subsequent determination function;

— **determination**, which can include conformity assessment activities such as testing, measuring, inspection, monitoring, assessment of the process, verification and validation, and auditing to provide information regarding the requirements for the process as input to the review and attestation functions;

— **review**, which means consideration of the suitability, adequacy and effectiveness of selection and determination activities, and the results of these activities, with regard to fulfilment of specified requirements;

— **decision** on certification as a conclusion based on the results of review, that fulfilment of specified requirements has or has not been demonstrated;

— **attestation**, which means issue of a statement of conformity, based on a decision following review, that fulfilment of specified requirements has been demonstrated;

— **surveillance** (where specified by the certification scheme), which means systematic iteration of conformity assessment activities as a basis for maintaining the validity of the statement of conformity.

4.3.2.3 Whenever certification of processes is performed, a certification scheme is in place and defines specific activities for the elements as described in 4.3.2.2.

4.4 Scheme owner

4.4.1 The scheme owner is a person or organization responsible for developing and maintaining a specific scheme for the certification of processes (see ISO/IEC 17067:2013, 6.3).

The following main types of scheme owners can be identified:

a) certification bodies;

b) organizations that are not certification bodies, such as regulatory bodies, trade associations or other organizations that develop a certification scheme;

c) a group of certification bodies or organizations, perhaps in different countries, that can together set up a certification scheme.

NOTE 1 A group of certification bodies or organizations can establish a management structure so that the scheme can operate effectively.

NOTE 2 The publication of a process standard or a standard relating to a conformity assessment scheme for a process by a national, regional or international standards body or standards development organization (SDO) does not make it a scheme owner. This does not preclude the standards body or SDO from being a scheme owner in addition to being a standards body or SDO.

4.4.2 The scheme owner should:

— be a legal entity or part of a legal entity;

NOTE 1 A governmental scheme owner is deemed to be a legal entity on the basis of its governmental status.

— take responsibility for the objectives, the content and the integrity of the scheme;

— implement operational controls to protect the confidentiality of information provided by the parties involved in the scheme;

— evaluate and manage the risks/liabilities arising from its activities;

NOTE 2 Evaluating risks does not imply risk assessments as outlined in ISO 31000.

— understand the assumptions, influences and consequences involved in establishing, operating and maintaining a scheme on an ongoing basis;

— ensure that the scheme is developed by persons competent in both technical and conformity assessment aspects;

— document the content of the scheme;

— have adequate arrangements (e.g. insurance or reserves) to cover liabilities arising from its activities, i.e. arrangements should be appropriate (e.g. for the range of activities and schemes undertaken and in the geographic regions in which the scheme operates);

— have the financial stability and resources required for it to fulfil its role in the operation of the scheme;

— set up a structure for the management of the scheme;

— maintain the scheme and provide guidance when required.

4.5 Engagement of interested parties

4.5.1 When developing a scheme, the scheme owner should have a clear understanding of the objectives of the scheme and the assumptions that underlie the need for, and the acceptance of, the scheme. To assist in this, the scheme owner should be inclusive, identify and invite interested parties and seek their opinions and define the type of their participation in scheme development.

4.5.2 Before developing the specific content of the scheme, the interested parties should agree on the following:

— confirmation of the ownership;

— confirmation of the governance and decision-making mechanisms that might or might not provide for direct involvement of interested parties;

— confirmation of the underlying business and funding model;

— providing an outline for monitoring and periodic review of the scheme.

4.5.3 Once developed, the scheme owner should ensure that information about the scheme is made publicly available upon request to ensure transparency, understanding and acceptance.

4.5.4 The scheme owner should ensure that the scheme is regularly reviewed, including confirmation that:

— it is fulfilling its objectives, in accordance with a process that includes interested parties;

— it is operated by competent, consistent and impartial certification bodies;

— it is delivering the results in an effective manner according to the specified requirements.

4.6 Scheme management

4.6.1 Scheme documentation

The scheme owner should create, control and maintain adequate documentation for the operation, maintenance and improvement of the scheme. The documentation should specify the rules and the operating procedures of the scheme, and in particular the responsibilities for governance of the scheme.

4.6.2 Reporting to the scheme owner

When reporting to the scheme owner is required (e.g. by certification bodies), the content and frequency of reporting should be defined. Such reporting can be for the purpose of scheme improvement, for control purposes and for monitoring the extent of conformity by process operators.

4.6.3 Outsourcing

If the scheme owner outsources all or part of the management of the scheme to another party, it should have a legally binding contract defining the duties and responsibilities of both parties. A governmental scheme owner can outsource management of the scheme by regulatory provisions.

4.6.4 Scheme integrity programme

The scheme owner should implement and perform a programme (e.g. validation audit, surveillance or other checks) to ensure scheme objectives are being fulfilled which can include monitoring certification bodies activities.

4.6.5 Review of scheme operation

The scheme owner should define a process for reviewing the operation of the scheme on a periodic basis in order to confirm it is meeting its objectives and to identify aspects requiring improvement, taking into account feedback from interested parties. The review should include provisions for ensuring that the scheme requirements are being applied in a consistent manner.

The review should at least consider the following:

— any requests for clarification related to scheme requirements;

— feedback from interested parties;

— responsiveness of the scheme owner to requests of information;

— the need for integrity programmes (see 4.6.4).

4.6.6 Marketing

The scheme should define the policies and procedures related to marketing, including the extent to which certification bodies and their clients can make reference to the scheme to ensure that such claims are not misleading.

4.6.7 Fraudulent claim of certification

Actions and responsibilities for situations where certification under the scheme is being claimed fraudulently should be described.

4.6.8 Complaints and appeals

4.6.8.1 The scheme owner should define the complaints and appeals process and who is responsible for undertaking this process.

4.6.8.2 Appeals against the decision of the certification body and complaints about the certification body should be addressed to the certification body in the first instance.

4.6.8.3 Appeals and complaints that have not been, or cannot be, resolved by the certification body can be addressed to the scheme owner if it is not the certification body.

5 Contents of a scheme for the certification of processes

5.1 General

There are specific elements to be considered when developing and operating a scheme for the certification of processes. It is particularly relevant to those persons and organizations that are considering the establishment of a scheme or acting as interested parties (e.g. process operator, certification body, product and service provider, customer or public authority).

5.2 Scope of the scheme

The scope of the scheme is defined in terms of the characteristics and requirements of the process and other requirements as specified by the scheme for the certification of processes and the conditions under which it is intended to be applicable (e.g. technical or geographical areas).

5.3 Elements of a certification scheme

A scheme for the certification of processes should specify the following elements:

a) the scope of the scheme;

b) the requirements against which the process is certified, by reference to standards or other normative documents; where it is necessary to elaborate upon the requirements to remove ambiguity, the explanations should be formulated by competent people and should be made available to all interested parties;

NOTE Further guidance on how to formulate specified requirements is provided in ISO/IEC 17007.

c) any other requirements to be met by the process operator, e.g. process activities, personnel competency or operation of a management system to ensure the demonstration of fulfilment of specified requirements is valid for the ongoing provision of certified processes;

d) the requirements for certification bodies and other conformity assessment bodies involved in the certification process; these requirements should not be in contradiction to the requirements of the applicable standards for conformity assessment bodies;

e) whether conformity assessment bodies involved in the scheme will be accredited, will participate in peer assessment or will be recognized in another manner; if the scheme owner requires that conformity assessment bodies are accredited, the appropriate references should be specified, e.g. that the accreditation body is a member of a mutual recognition arrangement between accreditation bodies;

f) the methods and procedures to be used by the conformity assessment bodies and other bodies involved in the implementation and operation of the scheme for the certification of processes, so as to ensure the integrity and consistency of the outcome of the certification;

g) the information to be supplied to the certification body by an applicant for certification (e.g. see ISO/IEC 17065:2012, 7.2);

h) the content of the statement of conformity (e.g. certificate, online database) which unambiguously identifies the process to which it applies and a period of validity;

i) the conditions under which the process owner can use the statement of conformity or marks of conformity;

j) where marks of conformity can be used, the ownership, use and control of the marks, the requirements of ISO/IEC 17030 should be applied;

k) the resources required for the operation of the scheme, including impartiality and competence of the personnel (internal and external), the evaluation of resources, and the use of outsourced activities;

l) how the results of the selection and determination (i.e. evaluation as defined in ISO/IEC 17065) will be reported and used by the certification body and the scheme owner;

m) how nonconformities with the certification requirements, which include process requirements, will be dealt with and resolved;

n) surveillance procedures, where surveillance is part of the scheme;

o) the criteria for participation of certification and other bodies in the scheme and for the access of process owner to certification in accordance with the scheme owner requirements;

p) content, conditions and responsibility for publication of a directory of certified processes by the certification body or the scheme owner;

q) the need for, and content of, legally enforceable arrangements, e.g. between scheme owner and certification body, scheme owner and process owner, certification body and process owner; the rights, responsibilities and liabilities of the various parties should be defined in such arrangements;

r) general conditions for granting, maintaining, continuing, extending the scope of, reducing the scope of, suspending and withdrawing certification (including requirements for discontinuation of advertising and return of certification documents and any other action if the certification is suspended, withdrawn or terminated);

s) if certification covers more than one legal entity (e.g. in production of sustainable cocoa or of organic farming), the scheme owner sets the requirements for the involvement of several entities in the process;

t) the way in which complaints will be addressed;

u) the way in which the process owner makes reference to the scheme in their publicity material;

v) retention of records by scheme owner and certification bodies.

5.4 Selection elements in the scheme

5.4.1 Certification requirements

5.4.1.1 Within the declared scope (see 5.2), the scheme specifies the requirements that the process is intended to fulfil. These requirements are specified by reference to standards or other normative documents that have been developed in accordance with the guidance in ISO/IEC 17007.

5.4.1.2 Certification requirements are comprised of:

— specified requirements for the process;

— other requirements for the process owner to fulfil, including the following:

  — signing a certification agreement;

  — agreeing to the arrangements for the evaluation (including sampling);

  — payment of necessary fees;

  — signing a licensing agreement for the use of the certification mark;

  — providing information on the process to be certified.

NOTE Requirements can include obligations contained in regulations, contractual agreements, service level agreements, etc.

5.4.1.3 Certification requirements can be qualitative or quantitative and can include implementation of management system and criteria related to the satisfaction of interested parties such as the user or client.

5.4.2 Sampling

5.4.2.1 Where applicable, the scheme should define the extent to which sampling of the process to be certified is required, and on what basis such sampling should be undertaken. The scheme should define when sampling is required and who is permitted to undertake it.

NOTE Useful information on this topic is given in ISO 10576-1, ISO 28590, ISO 3951-1 and ISO 22514-1.

5.4.2.2 The scheme should specify the sampling methods to be used. Sampling should be representative of the requirements to be fulfilled to address the different steps of the process based on critical elements such as complexity or risk of the process. This includes risk associated with the operation of the process, the risk that the process does not conform and the risk of the consequences of such nonconformity. It should also consider all locations (physical or virtual) as well as any outsourced activities, the time and duration at which the process is conducted.

5.4.3 Acceptance of conformity assessment results

In some cases, the process owner might have obtained the results of evaluation activities prior to making an application for certification. In such a situation, the conformity assessment result can be from a source not within the contractual control of the certification body. The scheme should define whether and under what conditions such conformity assessment results can be considered in the certification activities, e.g. in the evaluation plan (see 5.5.3).

5.4.4 Evaluation activities

5.4.4.1 The scheme should specify one or more evaluation activities that the certification body should use. Evaluation activities can include:

— validation of the design of the process for its intended use;

— audit, inspection, verification and testing of the process inputs, the process and the process outputs;

— interview and communication with process personnel, which can include the assessment of their competence;

— announced or unannounced observation or witnessing of the process;

— obtaining and assessing feedback on the process and customer experience (e.g. customer satisfaction surveys);

— assessing resources used in the operation of the process (e.g. access to adequate numbers of competent personnel, facilities, equipment and technology);

— assessing contractors, subcontractors, franchisees, etc. where the process operation is contracted or outsourced;

— audit of any management system that enables the process owner to manage its operation of the process, and to respond effectively to complaints and nonconformities with appropriate correction and corrective actions;

— assessing the management and control of documentation, including any necessary aspects to address confidentiality and privacy requirements;

— review of documented information;

— on-site or remote visits, either at the physical location at which the process is being operated, or at any virtual locations where the process is being operated (e.g. a specific internet site).

5.4.4.2 The scheme should specify the rules to be applied when the process owner outsources all or part of the process operation. Before signing a certification agreement, the scheme should require the certification body to ensure the certification body has access to all relevant information.

5.4.5 Outsourcing of the conformity assessment activities

If the scheme permits outsourcing of evaluation activities (see 5.4.4) the scheme should require these bodies to meet the applicable requirements of the certification scheme and of the relevant International Standards. The scheme should state the degree to which prior agreement to outsourcing needs to be obtained from the scheme owner or the process owner whose processes are being certified under the scheme.

5.5 Certification process

5.5.1 Certification phases

The scheme should specify the steps and activities that are expected to be undertaken during the certification process. These steps should correspond to those set out in ISO/IEC 17065:2012, Clause 7, as follows:

— application (see 5.5.2) and application review;

— evaluation (see 5.5.3);

— review (see 5.6);

— certification decision (see 5.7);

— attestation (see 5.8), including certification documentation;

— surveillance (see 5.10).

Further information on some of these steps is provided in the following subclauses.

5.5.2 Application for certification and the certification agreement

5.5.2.1 The scheme should specify the required information to be submitted at the time of application by the client to the certification body. Annex C provides an example of such information.

5.5.2.2 The scheme can also prescribe additional information from what is already identified in ISO/IEC 17065, in relation to a certification agreement. A certification agreement is established between the certification body and the applicant for certification. Annex B provides an outline of a certification agreement.

5.5.3 Evaluation

5.5.3.1 The scheme should require the certification body to carry out the selected evaluation activities. Based upon the evaluation activities specified in the scheme, the certification body should prepare an evaluation plan. The evaluation plan can be a generic plan that can be used by all certification body evaluation activities for all processes under the same scheme, or an individual plan for each process or particular evaluation, or a combination of both.

The evaluation plan should specify:

a) the standards and other normative documents that specify the process requirements;

b) when specific requirements of a normative document are waived from evaluation and whether justification needs to be documented and made publicly available;

c) the evaluation methods and procedures to be used for assessing the process;

d) the process samples and/or the sampling procedures required for evaluation;

e) the coverage and the extent of the auditing of the management system;

f) the personnel and other resources, including outsourcing, to be used for the evaluation.

NOTE Examples for requirements for process reference models, process assessment and process maturity models, as well as requirements for a process measurement framework for process capability, are provided respectively in ISO/IEC 33002, ISO/IEC 33004 and ISO/IEC 33020.

5.5.3.2 The scheme should specify how nonconformities are identified and dealt with under the scheme. This can include documenting nonconformities, the timeframes within which nonconformities are expected to be resolved, and actions that take place when nonconformities are not resolved within prescribed timeframes.

5.5.3.3 The certification scheme should specify how the information and results of all evaluation activities specified in the scheme are collated, evaluated to determine fulfilment of the specified requirements and documented, prior to review.

5.6 Review

Once evaluation activities have been completed, the results of initial process evaluation and the on-site assessment are reviewed to ensure that they provide a suitable, adequate and effective demonstration that the process and the management system fulfil the specified requirements. The review is carried

out by a person (or group of people) who has not been involved in the evaluation activities. If the evidence is sufficient, a recommendation for certification is made.

5.7 Decision

When the outcome of the review is positive, a decision is made to grant certification. When the outcome of the review is negative, a decision is made not to grant certification. The client is informed of the reasons for the negative decision. The decision is made by a person (or group of persons) who has not been involved in the evaluation activities. The review and decision can be made by the same person or group of persons.

5.8 Attestation

5.8.1 Following the decision to grant certification, the certification body issues a statement of conformity.

5.8.2 The scheme should define the form and content of certification documentation and how to make it publicly available.

5.9 Use of certificates and marks of conformity

5.9.1 Control of the mark

5.9.1.1 Where the scheme provides for the use of certificates, marks or other statements of conformity, there should be a licensing agreement or other form of enforceable agreement to control such use. Such agreement can include provisions related to use of the certificate, mark or other statement of conformity in communications about the certified process, and requirements to be fulfilled when certification is no longer valid. Depending on who owns and who controls the certificate, mark or other statement of conformity, such agreement can be between two or more of the following:

— scheme owner;

— certification body;

— client.

5.9.1.2 Examples of the information to be included in an agreement and a licence are included in Annexes D, E and F.

NOTE If the provisions addressed by the licensing agreement are incorporated in the application form (if the scheme requires an application form) or the certification agreement, a separate licensing agreement might not be necessary.

5.9.2 Mark of conformity

5.9.2.1 The scheme can determine if a specific mark of conformity will be granted. If this is the case, the scheme should specify requirements for its use, ensuring that it is used only in conjunction with the certified process, e.g. on sales literature or promotional material, packaging of the process output. The scheme should specify requirements for ensuring that the mark of the certified process is not misleading with regards to marks used for certified products and services.

5.9.2.2 The owner of a mark of conformity is responsible for protecting the mark legally against unauthorized use.

5.9.2.3 Marks of conformity and their use should be in accordance with ISO/IEC Guide 23 and ISO/IEC 17030, and the certification documentation and mark of conformity should be distinctive and be:

a) proprietary in nature, with legal protection as regards composition and control of use;

b) so coded or otherwise designed as to aid in the detection of counterfeiting or other forms of misuse.

5.9.2.4 If a mark of conformity is used on an ongoing basis, ISO/IEC 17065 requires the certification body to perform surveillance. If the scheme does not define the surveillance activities, each certification body that operates the scheme will perform the surveillance activities it sees fit.

5.9.3 Misuse of the mark

5.9.3.1 The scheme should specify what action should take place when unauthorized, incorrect, or misleading use of the certification documentation or marks of conformity is experienced.

5.9.3.2 These actions can include undertaking investigations, warning notifications, corrective actions undertaken in accordance with ISO Guide 27, withdrawal of certification, and legal actions.

5.9.3.3 The scheme should clearly allocate responsibility to the person or body who should undertake the specified actions, e.g. the scheme owner or the certification body.

5.10 Surveillance and continuous conformity

5.10.1 The scheme should specify whether or not surveillance is required, especially when the certified process is operated on an ongoing basis. If surveillance is included, the scheme should define the set of activities that make up surveillance. When deciding upon the appropriate surveillance activities, the scheme owner should consider the nature of the process, the probability and consequences of nonconforming processes and the frequency of the activities.

5.10.2 The frequency with which the activities are carried out can be adjusted in the light of the results of previous evaluations and surveillance cycles. For example, if nonconformities in processes or the process operation have been found, surveillance can be carried out more frequently until the necessary level of confidence is restored.

5.10.3 The specification of surveillance activities should consider the characteristics and the operation of the process.

5.10.4 It might not be necessary to repeat all of the elements of the initial process evaluation; however, the selected elements need to be capable of confirming on-going validity of the statement of conformity. Certification bodies can apply automated or information communication technology assisted surveillance techniques.

5.10.5 The scheme should require the process operator/client to inform the certification body, without delay, of any process change that can affect its ability to conform with the certification requirements. Depending on the change, a certification body can perform additional conformity assessment activities.

5.11 Changes affecting certification

5.11.1 Changes in specified requirements

The scheme owner should monitor the development of the standards and other normative documents which define the specified requirements used in the scheme. Where changes in these documents occur, the scheme owner should have a process for making the necessary changes in the scheme, and for

managing the implementation of the changes (e.g. transition period) by the certification bodies, process owner and, where necessary, other interested parties.

5.11.2 Other changes to the scheme

The scheme owner should define a process for managing the implementation of other changes to the rules, procedures and management of the scheme.

Annex A
(informative)

Examples of schemes for the certification of processes

A.1 General

This annex contains an overview table listing different generic categories of certification of processes and five examples of existing schemes for the certification of processes.

NOTE These examples are given for references purposes only. This information is given for the convenience of users of this document and does not constitute an endorsement of the schemes by ISO.

Each example represents a different type of certification scheme. The intention is to illustrate how a certification scheme for a process can be established and the variations in types and structures of the schemes.

The five schemes are summarized according to a common structure for the purpose of this document.

A.2 Overview of different generic categories of certification of process

Table A.1 provides an overview of the different generic categories of certification of process.

Table A.1 — Different generic categories of certification of process

Process types	Examples
Characteristic of the output assured by assessing the process	— Organic (Agriculture) — Sustainability — Food — Welding — Non-Destructive Testing — PED design review — Construction planning and design, factory process certification (coatings, post-tension) — Chemical, oil, gas — Public transport — Logistics — Production monitoring: Type 5 (ISO/IEC TR 17026) — Precast Concrete Plant Certification — Construction installation (such as elevators) — Medical healthcare — Good Manufacturing Process (GMP) such as Pharmaceutical excipients, Dietary supplements — Servicing & Maintenance — Complex systems engineering designs for safety (e.g. fire safety engineering)

Table A.1 *(continued)*

Process types	Examples
Information and Communication Technology	— Software — Internet — Cyber Security — Cloud — Critical Infrastructure — Credit Card — Internet of Things — Grid — Functional Safety — Sensors — Electronic Health Records — Tele communication — Safety critical software
Process chain and output (boundaries)	— Supply chain — Chain of custody — End of life process for products (e.g. Recycling, materials recovery)

A.3 Example of an Information and Communication Technology process certification scheme — TickITplus

A.3.1 General

The TickITplus scheme[1)] is a process-based certification scheme designed to be applied in the field of Information and Communication Technology. It is very flexible and can be tailored to suit specific scopes and fields of application. The TickITplus Scheme is comprised of five levels of capability/maturity ranging from Bronze level through to Platinum level.

It incorporates all the requirements of ISO 9001:2015 and the baseline scheme called TickITplus Foundation Level is recognized as an ISO 9001 sector scheme under ISO/IEC 17021-1 accreditation.

There is the possibility to combine certification for quality, service management and information security in a single audit process, thereby addressing the requirements of ISO 9001, ISO/IEC 20000-1 and ISO/IEC 27001 in a single assessment.

A.3.2 Background

The TickITplus scheme is an evolution of the TickIT scheme which had been in operation for in excess of 15 years. There was market demand for a way for software developers to differentiate themselves and show those that had better quality processes. TickITplus builds on the requirements of ISO 9001 using the process assessment model in ISO/IEC 33002, ISO/IEC 33004, ISO/IEC 33020 and other International Standards on process assessment developed by ISO/IEC JTC 1, with system design best practice criteria specified in ISO/IEC/IEEE 12207.

1) Details of the scheme can be downloaded from: https://www.tickitplus.org.

A.3.3 Scheme requirements

The scheme requirements are defined in the TickITplus Core Scheme Requirements (CSR) document which sets out how the scheme operates. This is supported by the Base Process Library (BPL) document which contains all the definitions of the generic processes that can be required in the individual scopes of certification.

The scope of certification is up to the organization to define. It can relate to a single department, e.g. an IT service centre, or be organization-wide. The certified processes have been grouped together into what has been termed "Scope Profiles". An organization can be certified to one or more Scope Profiles. Selection of a Scope Profile will always include all the requirements of ISO 9001, but can also embrace another International Standard such as ISO/IEC 27001.

A.3.4 Certification requirements

The certification requirements are that an organization seeking certification applies to a conformity assessment body (CAB) stating the Scope and Scope Profile(s) to be certified. The organization maps its implemented processes to the Generic Processes defined in the Base Process Library to prove that all the required processes within a Scope Profile to be certified have been addressed. This process map is called the Process Reference Model (PRM). The organization is required to implement internal audits prior to certification to demonstrate that it has evaluated its processes and is beginning to collect metrics on process performance. A key part of the scheme is the concept of continual improvement built around the analysis of process metrics.

A.3.5 Certification process

The certification process requirements are a normal three-year certification cycle. Companies apply for initial certification which lasts for three years, once granted. After three years, the company undergoes a full recertification which grants certification for another three years. This is then repeated every three years.

The certification process entails an initial audit which is carried out to evaluate the PRM and to plan the main assessment visit. A detailed assessment plan is created by the CAB which plans out how the assessment will be carried out. At Bronze level, at least one instance of every process within Scope will be sampled for compliance for correct inputs, correct processing and correct outputs. TickITplus has the concept of Outcomes, which are the cumulative effects of outputs. For example, if a company consistently delivers quality product to its customers, then the outcome is that the company is successful.

At higher levels of capability (e.g. at Gold level), greater sampling of implemented processes will take place across the organization. There is a greater level of definition of the requirements for the processes to demonstrate compliance. At higher maturity levels, the expectation for the collection, analysis and improvement of processes is also higher.

A.3.6 Surveillance

The TickITplus scheme requires at least annual surveillance visits to the organization which are planned and organized in advance. It is possible to have six monthly surveillance visits if that suits the organization better. Each surveillance samples annually at least 33 % of the processes in Scope. Recertification assessments sample 100 % of processes in Scope.

It is possible for organizations to move certification between capability levels either by requesting a specific grade change assessment, or in addition to a routine surveillance audit visit. Organizations can also be moved down a grade if they are found at surveillance not to be meeting the criteria specified for their current capability level.

A.4 Example of an output assured process certification scheme — Leadership in Energy and Environmental Design (LEED)

A.4.1 General

The LEED (Leadership in Energy and Environmental Design) Rating System is a voluntary, consensus driven, internationally recognized green building certification system providing third-party attestation that a building or community was designed and built using strategies aimed at improving performance across metrics such as energy savings, water efficiency, CO_2 emissions reduction, improved indoor environmental quality, and resource stewardship.

A.4.2 Background

When the U.S. Green Building Council launched LEED over a decade ago, it created a foundation for sending market signals to the building industry to move toward sustainable alternatives. LEED provided a way to quantify benefits that had previously been considered too difficult to quantify in a consistent manner, putting things like energy and water efficiency, green materials and indoor air quality on the radar screen of building projects around the country and the world. These market signals opened up potential for new products and services, and incentivized new measures.

A.4.3 Scheme requirements

LEED provides building owners, design teams, and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. Project teams use LEED as both a design guide and verification system to measure progress towards defined performance goals.

LEED is structured to encourage interdisciplinary project teams to engage in an integrated project delivery process. By combining mandatory and optional strategies in a framework that rewards successful projects with a third-party certification, LEED motivates project teams to take action, which results in higher performing buildings. LEED is organized to promote action in six key areas, known as credit categories:

— location and transport;

— sustainable sites;

— water efficiency;

— energy and atmosphere;

— materials and resources;

— indoor environmental quality.

Under each of these credit categories, a collection of mandatory and optional strategies is outlined. Mandatory strategies are deemed prerequisites for entering the system, while optional strategies are referred to as “credits”. Each prerequisite and each credit has a stated intent and a set of requirements. To achieve certification, projects document compliance with all prerequisites and a sufficient number of credit requirements to amass 40 of the available 100 points in LEED. Higher levels of achievement are rewarded with higher levels of certification:

— 40 points: LEED Certified;

— 50 points: LEED Silver;

— 60 points: LEED Gold;

— 80 points: LEED Platinum.

The Integrative Process, as defined by the associated credit in the LEED rating system, intends to support high-performance, cost-effective project outcomes through an early analysis of the interrelationships among systems and components. Beginning in pre-design and continuing throughout the design phases, building project teams identify and use opportunities to achieve synergies across disciplines and building systems. These analyses then inform the owner's project requirements (OPR), basis of design (BOD), design documents, and construction documents for the project.

The LEED Integrative Process credit introduces an integrative process by requiring energy- and water-related research and analysis to inform early design decisions through high levels of collaboration among all project team members. A fully integrative process accounts for the interactions among all building and site systems; this credit serves as an introduction to the comprehensive process, rewarding project teams that apply an integrative approach to energy and water systems. While meant to improve the design process through further integration, the credit itself requires a series of tasks to be completed by the integrated team, including basic energy modelling, development of a water budget, and creation of a signed project team letter attesting to the integrative process approach that was carried out and its anticipated outcomes. LEED does not define or certify the processes that projects follow for these examples, but evaluates whether the credit deliverables meet certification requirements.

The reference guide (LEED v4) and beta guide (LEED v4.1) provide more detailed information about the Integrative Process credit.

A.5 Example of an output assured process certification scheme — IECQ Approved Process Certification

A.5.1 General

IECQ (IEC Quality Assessment System for Electronic Components) Approved Process Certification can be applied to any process which can affect conformity or compliance of electronic components, related assemblies or services. For example, this can cover, but is not limited to; product engineering, printed wiring board manufacture, electronic component manufacturing, printed circuit board assembly, Electro Static Discharge (ESD) controls or even supply chain management.

A.5.2 Background

The main market driver for this certification service is business-to-business facilitation. This is achieved through efficient vendor and supply chain qualification. It removes the need for suppliers to be audited multiple times by multiple potential customers, and eliminates the need for customers to audit multiple suppliers in order to qualify just one. The electronic components industry relies on, as a part of its manufacturing infrastructure, a supporting industry of organizations providing a wide range of specialized services, processing, and manufacture of piece parts and material. The IECQ Approved Process Scheme permits such organizations to certify their specialized services or processes under the IECQ Approved Process Scheme. Manufacturers of finished electronic components seek certification to the IECQ Approved Component Scheme (IECQ 03-3) if they wish to qualify finished electronic components. However, such manufacturers can also seek certification for specific services or processes or for the manufacture of piece parts and material in accordance with the IECQ Approved Process Scheme. This approach recognizes the diverse infrastructure of the electronic components industry and makes it possible for an electronic component manufacturing capability to be assessed as a totality, taking account of the separate operations of several companies, each of which contributes piece parts, materials, processing or technical services to the final product.

A.5.3 Scheme requirements

The IEC operates many different global conformity assessment (CA) systems, each of which operates certification schemes for different sectors. All the IEC CA systems are managed and operated in the same way. IEC does not do any testing, inspection, assessment or certification itself, rather these conformity assessment activities are performed by commercial conformity assessment bodies (CABs), including testing laboratories, inspection bodies, auditing bodies, assessment bodies, certification bodies, and so on, from around the world. In order to achieve consistent results worldwide, the schemes

require that the participating CABs come together into committees to discuss the various standards and to achieve a common understanding, interpretation and methodology which are then documented into operational documents.

These professional CABs are qualified into the IEC CA systems through a peer assessment process, which is similar to an accreditation process in that it assesses their competency, but it goes further and also checks that they understand the common interpretation of the specific standards and, more importantly, that they consistently apply the methodologies given in the operational documents.

A.5.4 Certification requirements

The organization's Quality Plan Summary is a document describing the processes and process-control methods relevant to the range of activities and/or technical services for which the organization is seeking IECQ Approved Process (AP) certification.

The summary includes such information as:

— the minimum conformity requirements according to a standard or specification;

— design rules, where relevant;

— a process description;

— a process flow chart;

— a list of the processing facilities and the inspection, measuring and test equipment involved.

Assessments for IECQ AP certifications are carried out by an IECQ certification body (CB) assessment team. The number of assessors/auditors and assessment days is dependent on the size of the enterprise and the scope of the certification application. The combined competence of the IECQ CB Assessment team covers the technical domain, quality management practices and relevant knowledge and experience related to the industry and product of the components being certified, along with the knowledge of the IECQ Scheme documents.

A.5.5 Certification process

How the Approved Component Scheme works in practice is that a process provider makes an application to an IECQ certification body, or IECQ CB. The IECQ CB then checks the application documents and if they are complete proceeds with the certification process. It performs a site assessment of the technical and quality management systems. Then, on the basis of the assessment the IECQ CB issues a certificate, via the IECQ On-Line Certificate System which provides both a standard format for the IECQ AP Certificate as well as a central location where all IECQ Certificates reside, regardless which IECQ CB is issuing certification, this On-line certificate system provides full public access in real time, for instant checking of certifications. It is both the IECQ standardized process of certification along with the full transparency of information that creates confidence in the IECQ certificate. The certification process uses independent conformity assessment, site assessments and ongoing surveillance of an organization's business and quality management systems. The assessments and surveillance are conducted by an independent IECQ CB. The IECQ CB assesses the degree of compliance with procedures established and implemented in the organization's business and quality management systems. The certification process bases its requirements for conformity of the supplier's organization on specific IECQ requirements and on those of ISO 9001, with additional requirements specific to the electronic components industry.

A.5.6 Surveillance

Surveillance assessments are then carried-out according to a surveillance plan. Under the surveillance plan for maintenance of certification, the IECQ CB that has issued the certificate conducts site assessments on a programme agreed between the IECQ CB and the certified organization, in line with the IECQ Scheme rules. The frequency of surveillance assessments will depend on the size of

the enterprise, the scope of the activities that are certified and the complexity of the assessment. The minimum frequency for surveillance assessments is once a year, but it can be as many times as needed.

A.6 Example of an output assured process certification scheme — IECQ HSPM Scheme

A.6.1 General

The IECQ HSPM Hazardous Substance Process Management Requirements are designed to evaluate equipment manufacturers' and related organizations' processes for compliance with QC 080000 IECQ HSPM (IECQ HSPM), which uses ISO 9001 as a basis and adds to the ISO 9001 requirements to deal with the management of hazardous substances. To assist industry, the IECQ QC 080000 document follows the same clause numbering as ISO 9001:2015.

A.6.2 Background

IECQ HSPM Scheme defines hazardous substances as any substances regulated by applicable legal or customer requirements as to prohibit, restrict, reduce its use or notify its existence, which will inherently do harm to human health or the safety of environment and provides industry and government with an effective means of demonstrating compliance with requirements such as EU RoHS Directive and other national and regional regulations. Electrical and electronic equipment contains different hazardous materials which can be harmful to human health and the environment. In order to ensure that products respect national and/or regional regulations, and to avoid potential recalls or liability suits, an electronic component manufacturer or supplier can be called upon to prove compliance with regulations concerning hazardous substances. IECQ HSPM provides the requirements used to demonstrate to the international market place that the organization has developed, documented, and implemented processes for managing the production, selection and use of electronic components, assemblies, processes and related materials in accordance with customer, local, national and international Hazardous Substance Free (HSF) requirements (like Sony Green, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS), Waste Electrical and the Electronic Equipment (WEEE) Directives, Registration Evaluation Authorization and Restriction of Chemicals (REACH), China RoHS and other local environmental regulations) for their scope of activity.

A.6.3 Scheme requirements

The IEC operates many different global CA systems, each of which operates certification schemes for different sectors. All the IEC CA systems are managed and operated in the same way. IEC does not do any testing, inspection, assessment or certification itself, rather these conformity assessment activities are performed by commercial CABs, including testing laboratories, inspection bodies, auditing bodies, assessment bodies, certification bodies, and so on, from around the world. In order to achieve consistent results worldwide, the schemes require that the participating CABs come together into committees to discuss the various standards and to achieve a common understanding, interpretation and methodology which are then documented into operational documents.

These professional CABs are qualified into the IEC CA systems through a peer assessment process, which is similar to an accreditation process in that it assesses their competency, but it goes further and also checks that they understand the common interpretation of the specific standards and, more importantly, that they consistently apply the methodologies given in the operational documents.

National accreditation from IAF Member Accreditation Bodies is also used as part of the qualification and on-going surveillance monitoring of CABs approved to operate in the IEC Schemes.

A.6.4 Certification requirements

The certification process uses independent conformity assessments, site assessments and ongoing surveillance of an organization’s technical, business and quality management processes and systems. The assessments and surveillance are conducted by an independent IECQ Certification Body, or IECQ CB.

The requirements for conformity of an organization are based on criteria such as those contained in RoHS, China RoHS, the IECQ Scheme rules and IECQ QC 080000 and provide the platform needed to manage the substances within the organization, thereby providing a management system approach to controlling hazardous substances used within electrical and electronic equipment. Certification is granted only if the organization evaluated meets all the applicable IECQ scheme requirements for the intended scope of activity for which certification is applied, as stated by the organization in their application. The certificate has a three-year validity and is maintained within that period by yearly surveillance. IECQ HSPM assessments for compliance with IECQ QC 080000 involve a detailed technical focus that is far beyond what is normally required for an ISO 9001 Quality Management System or Environmental Management System audit. For this reason, initial assessments, surveillance and re-certification assessments cannot be substituted by ISO 9001 or ISO 14001 audits. Each site listed on the certificate is assessed by an on-site audit. Site sampling is NOT permitted within the IECQ HSPM Scheme.

A.6.5 Certification process

The applicant can be a designer, manufacturer, supplier, repairer, or maintainer of products. How the Hazardous Substance Process Management scheme works in practice is that an applicant makes an application to an IECQ CB. The IECQ CB checks the application documents and, if everything is in order, it proceeds with the certification process. An assessment team is sent to the site locations and performs site-assessments of the technical and quality management systems. The assessment team issues an IECQ HSPM Compliance Report Form, or CRF, and an IECQ Site Assessment Report, or SAR. Based on the results of the CRF and SAR, the IECQ CB issues an IECQ HSPM Certificate of Conformity (CoC).

Surveillance site-assessments are then carried-out annually.

For certification renewal, the same process is repeated every three years.

A.6.6 Surveillance

Normal surveillance assessments are held at least once a year. The number of assessors and assessment days involved depends on the size of the enterprise and the complexity of the assessment. Sometimes special surveillance assessments are also required. This can occur, for example:

— when an organization has relocated;

— when an organization has been taken over or acquired by another organization;

— if the Designated Management Representative (DMR) changes;

— if the IECQ CB has just cause for concern regarding the organization's continued conformity.

A.7 Example of a process chain and output certification scheme — Chain of custody

A process is considered to be a transformation of input into output, the output being a product, a service, a combination of both or another category of output.

A chain of custody is considered to be a sequence of responsibilities for inputs and outputs as well as the control of inputs and outputs as they move through each step in the relevant supply chain.

Where a chain of custody is intended to maintain specified characteristics, it should be organized to link organizations active in the chain of custody appropriately (e.g. with a scheme).

Any scheme covering processes along a particular supply chain ensuring a chain of custody with respect to the individual inputs and outputs should clearly define the boundaries. The first input considered as start and the final output considered as end point need to be specified and differentiated from process steps within this defined scope.

The actors and locations in the chain of custody need to be identified (e.g. manufacturer, broker, distributor, carrier, or retailer).

Specifications of a chain of custody process should include:

— identification of the characteristics to be maintained;

— definition of boundaries and scope;

— requirements for the integrity of the chain of custody;

— requirements for the properties of the applied chain of custody model (e.g. individual items bearing all the characteristics identified by the label or items bearing the identified characteristics on average or in specified proportions);

— identification of the actors;

— requirements for the interaction (e.g. material blending procedures to be applied or information to be passed on);

— requirements for claims to be made and used (e.g. regarding specified characteristics).

Requirements of the certification scheme should include:

— identification of the scope of the scheme, including the specified requirements for the chain of custody process (e.g. manufacturing woollen cloth for tailoring);

— identification and responsibilities of the scheme owner;

— identification of interested parties (e.g. trade associations, organizations acting in the chain of custody, consumers, regulators, verification bodies);

— conformity assessment activities to be involved (e.g. testing of semi-finished materials, verification of claims, auditing of management systems);

— evaluation activities (e.g. verifying material balance, reviewing documentation of raw wool acquisition, monitoring processing, verifying declarations, sampling wool blends);

— competence and recognition of the persons performing the required activities;

— management of non-conformities, changes (e.g. of the process or of the scope), complaints and appeals;

— content of the certificate and, if applicable, the use of marks;

— conditions of granting, maintaining, suspending and withdrawing the certificate;

— surveillance procedures.

A.8 Example of an output assured process certification scheme — Complex systems engineering designs for safety (e.g. fire safety engineering)

A.8.1 General

Systems engineering designs of safety systems is generally a complex process involving several steps, including the use of mathematical engineering tools. Examples are the design of building safety systems to safeguard against seismic, flood and fire events. Some safety design processes have matured over the past decades, and the process and engineering tools are included in engineering handbooks which are widely accepted. Therefore, confidence and quality in these design processes have been ensured.

A.8.2 Background

There are systems engineering design processes that use emerging engineering methods for which it can be desirable to have certification that a specific process, including certified engineering methods,

is followed to ensure quality. Fire safety engineering is a process that utilizes emerging engineering methods through which fire safety measures in the built environment are designed in lieu of prescriptive measures required in building fire codes. Although fire safety devices such as sprinklers and fire barriers are required to be certified in building fire codes, presently there is no certification requirements for the fire safety engineering design process which results in the specification of the necessary fire safety devices. Process certification schemes for fire safety designs based on fire safety engineering can be developed using the guidance in this document, including the use of certified fire calculation methods. This will ensure quality and increase the level of confidence in such designs.

A.8.3 Scheme requirements

ISO 23932-1 outlines the general principles and requirements for a fire safety engineering design and the implementation of fire safety design plans and fire safety management. It provides the process (necessary steps) and essential elements that are needed to design, implement and maintain a robust fire safety programme. The fire safety engineering process not only involves fire safety design, but also extends to the implementation of fire safety design plans and fire safety management. A set of ISO documents on fire safety engineering is available, which provides methods and data supporting the steps in a fire safety engineering design, as defined in the ISO 23932 series. This coherent set of ISO documents ensures an effective and correct application of fire safety engineering, which includes fire safety design, implementation of fire safety design plans and fire safety management.

A fire safety engineering process certification scheme based on the technical requirements in the ISO 23932 series, ISO/IEC 17067 and guidance in this document can be developed by either an industry forum or regulator, or in coordination of both, for the certification of building fire protection systems based on fire safety engineering.

Annex B
(informative)

Example of contents of a certification agreement

a) Parties to the agreement:
   - name and addresses of the parties;
   - authorized representatives under the agreement.

b) Defined terms and interpretations:
   - defined terms;
   - headings.

c) Processes to be operated.

d) Commitments of the process owner (see the listed items in ISO/IEC 17065:2012, 4.1.2.2), as well as commitments on the process owner where it is not the actual operator of the process.

e) Use of license, certificates and marks of conformity.

f) Surveillance of certification and continuous conformity.

g) Suspension and withdrawal of certification.

h) Complaints.

i) Appeals.

j) Use of subcontractors.

k) Changes by the process owner.

l) Changes to the scheme and specified requirements.

m) Transfer of certification.

n) Acceptance of evaluation results prior to application.

o) Intellectual property:
   - vests in the certification body;
   - ownership of pre-existing data and information;
   - data and information of parties outside the certification agreement, i.e. other than the certification body or its client;
   - moral rights and ethical standards;
   - ownership of certification documentation and marks of conformity.

p) Confidentiality.

q) Insurance and liability.

r) Termination.

s) Force majeure.

t) Survival and severability.

u) Dispute resolution.

v) Alteration of this agreement.

w) Serving notice under this agreement.

x) Governing law and jurisdiction.

y) Authorized representatives.

z) Activities to be provided:

— scheme title;

— specified requirements

— processes to be covered;

— locations of process operation to be covered.

aa) Fees and charges:

— general;

— incidental expenses;

— invoicing and payment.

Annex C
(informative)

Example of information on process operation and management system

C.1 General

This example provides preliminary information on the operation of the process for which certification is sought and on the management system which is used to control activities critical the process conformity. It is intended to help the certification body in its preparation of the initial evaluation involved. If the process is operated at different locations, the information for each location is supplied.

The amount of preliminary information to be provided by the applicant depends on the nature and complexity of the process.

C.2 Example of information provided

C.2.1 General

In this example, C.2.2 and C.2.3 list possible aspects where information can be provided on the process operations and management systems.

C.2.2 Process operation

C.2.2.1 Operators

— All information about the sites of operation of the process necessary for the certification body to plan the assessments.

— Organization having the process ownership and bearing overall responsibility for the process to be certified (including contact persons and contact details).

— All sites where the final process to be certified is operated (addresses and contact persons and contact details).

NOTE Where applicable, this information is required also for outsourced processes.

— Principal activities carried out at all these locations.

C.2.2.2 Organization operating the process

— Relationship of all sites of operation of the process owner organization.

— Information about the organization operating the process having the process ownership.

— Organization chart showing key personnel involved in the operation of the process and their roles.

— Authorization and training of personnel managing process operation activities.

— Information about the initiation and control of process operation.

C.2.2.3 Purchased materials, components and services

— Main materials, components and services purchased, relating to processes to be certified.

— Purchasing specifications.

— Supplier qualification process.

— Control of quality of incoming materials, components and services.

C.2.2.4 Process operation

— Description of process operations (key stages, flow chart).

— Outsourced activities (description of activity, name address and further details of contract relevant for process conformity).

— Description of process operations and equipment.

— Control of inventory.

— Control of work in progress.

— Control of process steps and outcomes.

C.2.2.5 Quality control of the capability of the process operation

— Activities carried out to assess the capability of the process.

— Metrics used to assess the operation of the processes.

— Responsibility for assessment activities.

— Existing conformity assessment attestations.

C.2.2.6 Documentation and records

— Specification for process and process operation.

— Control of changes to the process and process operation.

C.2.2.7 Certification documentation

— Scope of the certified process covered by the certification documentation.

— Control of the conditions under which the client makes reference to the certification of the process are in line with certification agreement.

C.2.3 Management system

C.2.3.1 Management system specification

— Conformity with ISO 9001 or equivalent (provide reference).

— Quality management system information.

— Scope of the management system covered by the certification documentation.

C.2.3.2 Organization

— Management structure.