
**Environmental information —
Competence requirements for
teams validating and verifying
environmental information**

*Informations environnementales — Exigences de compétence pour les
équipes de validation et les équipes de vérification des informations
environnementales*

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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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 ISO 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).

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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 jointly by Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 7, *Greenhouse gas and climate change management and related activities*, in collaboration with Subcommittee SC 2, *Environmental auditing and related environmental investigations*, and ISO/CASCO, *Committee on conformity assessment*.

This second edition cancels and replaces the first edition (ISO 14066:2011), which has been technically revised.

The main changes are as follows:

- the scope has been extended from greenhouse gas to environmental information claims;
- annexes providing additional competence requirements for certain types of environmental information statements have been added.

A list of all parts in the ISO 14000 series can be found on the ISO website.

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

This document specifies competence requirements for validation and verification teams (including technical experts) and independent reviewers for the benefit of environmental information programme administrators, regulators, and validation and verification bodies. To achieve consistency in the international marketplace and maintain public confidence in environmental information reporting and other communications, there is a need to define competence requirements for validation and verification teams (including technical experts) and independent reviewers.

Requirements for environmental information validation and verification bodies are established in ISO 14065. ISO 14065 requires that validation and verification bodies establish and maintain a procedure to manage the competence of its personnel undertaking the various validation or verification activities within the team and independent reviewer appointed for the engagement. It is the role of the validation or verification body to ensure that validation and verification teams (including technical experts) and independent reviewers have the necessary competence to effectively complete the validation or verification process. This document includes principles for ensuring competence of validation and verification teams (including technical experts) and independent reviewers. Supporting these principles are general requirements based on the tasks that validation or verification teams (including technical experts) and independent reviewers need to be able to perform and the competence required to do so.

This document can be used in conjunction with ISO 14065 as the basis for assessing and recognizing the competence of validation and verification teams (including technical experts) and independent reviewers.

Users of this document are encouraged to refer to applicable standards for the preparation of environmental information statements (see ISO 14016, ISO 14020, ISO 14021, ISO 14024, ISO 14025, ISO 14026, ISO 14030-1, ISO 14030-2, ISO 14030-3, ISO 14040, ISO 14044, ISO 14046, ISO 14064-1, ISO 14064-2, ISO 14067 and ISO 14097).

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Environmental information — Competence requirements for teams validating and verifying environmental information

1 Scope

This document specifies competence requirements for validation and verification teams (including technical experts) and independent reviewers.

This document is applicable to all organizations that plan and conduct external or internal validations, verifications and agreed-upon procedures (AUP).

This document is not linked to any particular environmental information programme. If a particular environmental information programme is applicable, competence requirements of that environmental information programme are additional to the requirements of this document.

NOTE Management process requirements for the competence of personnel are specified in ISO 14065:2020, 7.3.

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 14030-4, *Environmental performance evaluation — Green debt instruments — Part 4: Verification programme requirements*

ISO 14065:2020, *General principles and requirements for bodies validating and verifying environmental information*

3 Terms and definitions

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

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

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

3.1 Terms specific to competence

3.1.1

professional scepticism

attitude that includes a questioning mind and a critical assessment of evidence

[SOURCE: ISO 14050:2020, 3.4.14]

3.1.2

competence

ability to apply knowledge and skills to achieve intended results

[SOURCE: ISO 14050:2020, 3.1.10]

3.2 Terms related to environmental information

3.2.1

environment

surroundings in which an *organization* (3.3.3) operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships

Note 1 to entry: Surroundings can extend from within an organization to the local, regional and global system.

Note 2 to entry: Surroundings can be described in terms of biodiversity, ecosystems, climate or other characteristics.

[SOURCE: ISO 14001:2015, 3.2.1]

3.2.2

environmental performance

measurable results related to the management of environmental aspects

Note 1 to entry: Environmental aspects are elements of an *organization's* (3.3.3) activities or products or services that interact or can interact with the *environment* (3.2.1) (ISO 14001:2015, 3.2.2).

[SOURCE: ISO 14050:2020, 3.2.27, modified — “measurable results” replaced “performance”. Note 1 to entry added.]

3.2.3

environmental information

subject matter of a qualitative or quantitative nature that is related to environmental conditions or *environmental performance* (3.2.2)

Note 1 to entry: Environmental information can include statements and claims regarding greenhouse gas emissions, removals, emission reductions or removal enhancements of an *organization* (3.3.3), project (e.g. see ISO 14064-1 and ISO 14064-2), environmental footprints (e.g. see ISO 14067 for carbon footprints of a product, ISO 14046 for water footprints and ISO 14044 for life cycle assessment information) or environmental reports (e.g. see ISO 14016).

Note 2 to entry: ISO 14033 defines and specifies terms and procedures to establish reviewable and comparable quantitative environmental information.

[SOURCE: ISO 14065:2020, 3.1.4]

3.2.4

environmental information statement

declaration of *environmental information* (3.2.3)

Note 1 to entry: The environmental information statement can represent a point in time or can cover a period of time.

Note 2 to entry: The environmental information statement provided by the *responsible party* (3.3.4) should be clearly identifiable and capable of consistent evaluation or measurement against suitable *criteria* (3.4.16) by a *verifier* (3.4.6) or *validator* (3.4.2).

Note 3 to entry: The environmental information statement can be provided in: a report; a declaration; an economic, financial, or monetary valuation; an environmental product declaration; a life cycle assessment report; a climate change vulnerability or adaptation evaluation; a project plan; a label or logo.

Note 4 to entry: The term “environmental information statement” corresponds to the term “claim” used in ISO/IEC 17029:2019, 3.1.

[SOURCE: ISO 14065:2020, 3.1.5]

3.2.5

environmental information programme

rules and procedures for providing an *environmental information statement* (3.2.4)

Note 1 to entry: Environmental information programmes can be carried out at international, regional, national or subnational levels.

Note 2 to entry: A programme can also be called a “scheme”.

Note 3 to entry: Greenhouse gas emissions and removals, emission reductions or removal enhancements, greenhouse gas inventories, product carbon footprints and water footprints, and the *environmental information* (3.2.3) in sustainability reports are examples of subjects that may be verified in accordance with an environmental information programme.

Note 4 to entry: An environmental information programme may include requirements for *validation* (3.4.1) or *verification* (3.4.5).

3.2.6

sector

technical area sharing common attributes and similar environmental aspects

Note 1 to entry: Environmental aspects are elements of an *organization's* (3.3.3) activities or products or services that interact or can interact with the *environment* (3.2.1) (ISO 14001:2015, 3.2.2).

3.3 Terms related to people and organizations

3.3.1

client

organization (3.3.3) or person requesting *verification* (3.4.5) or *validation* (3.4.1)

Note 1 to entry: The client could be the *responsible party* (3.3.4), the environmental information programme administrator or other interested party.

[SOURCE: ISO 14064-3:2019, 3.2.5, modified — “environmental information” replaced “GHG”.]

3.3.2

intended user

individual or *organization* (3.3.3) identified by those reporting *environmental information* (3.2.3) as being the one who relies on that information to make decisions

Note 1 to entry: The intended user could be the *client* (3.3.1), the *responsible party* (3.3.4), environmental information programme administrators, regulators, the financial community, or other interested parties, such as local communities, government departments or non-governmental organizations.

[SOURCE: ISO 14065:2020, 3.2.4, modified — “environmental information programme administrators” replaced “programme owners”, “the general public” deleted, and “government departments” replaced “governmental” in Note 1 to entry.]

3.3.3

organization

person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives

[SOURCE: ISO 14065:2020 3.2.2.]

3.3.4

responsible party

person or persons responsible for the provision of the *environmental information statement* (3.2.4) and the supporting information

Note 1 to entry: The responsible party can be either individuals or authorized representatives of an *organization* (3.3.3) or project and can be the party who engages the *verifier* (3.4.6) or *validator* (3.4.2).

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Note 2 to entry: The responsible party may be the *client* (3.3.1).

[SOURCE: ISO 14065:2020, 3.2.3]

3.3.5

technical expert

person who provides specific knowledge on a specified subject

Note 1 to entry: A technical expert to the *validation team* (3.4.7) or *verification team* (3.4.8) does not act as a *validator* (3.4.2) or *verifier* (3.4.6).

[SOURCE: ISO 14050:2020 3.4.36, modified — Note 1 to entry added.]

3.4 Terms related to validation and verification

3.4.1

environmental information validation validation

process for evaluating the reasonableness of the assumptions, limitations and methods that support an *environmental information statement* (3.2.4) about the outcome of future activities

Note 1 to entry: The term “environmental information validation” is shortened to “validation” in this document to reduce sentence complexity and aid understanding.

[SOURCE: ISO 14065:2020, 3.3.16]

3.4.2

validator

competent and impartial person with responsibility for performing and reporting on a *validation* (3.4.1)

[SOURCE: ISO 14065:2020 3.3.6.]

3.4.3

validation opinion

formal written declaration to the *intended user* (3.3.2) on the reasonableness of the assumptions, methods and limitations used to develop forecasts and projections contained in the *environmental information statement* (3.2.4)

Note 1 to entry: The term “validation opinion” is a type of “validation statement” in ISO/IEC 17029:2019, 3.6.

Note 2 to entry: Reasonableness of the assumptions, methods and limitations includes consideration of conformity to applicable *criteria* (3.4.16).

[SOURCE: ISO 14065:2020, 3.3.25]

3.4.4

verification opinion

formal written declaration to the *intended user* (3.3.2) that provides confidence that the *environmental information statement* (3.2.4) is materially correct and conforms with the *criteria* (3.4.16)

Note 1 to entry: The term “verification opinion” is a type of “verification statement” in ISO/IEC 17029:2019, 3.7.

[SOURCE: ISO 14065:2020, 3.3.23]

3.4.5

environmental information verification verification

process for evaluating an *environmental information statement* (3.2.4) based on historical data and information to determine whether the statement is materially correct and conforms to *criteria* (3.4.16)

Note 1 to entry: Verification activities performed that do not lead to the expression of an opinion are called *agreed-upon procedures* (3.4.14).

Note 2 to entry: The term “environmental information verification” is shortened to “verification” in this document to reduce sentence complexity and aid understanding.

[SOURCE: ISO 14065:2020, 3.3.15]

3.4.6 verifier

competent and impartial person with responsibility for performing and reporting on a *verification* (3.4.5)

[SOURCE: ISO 14065:2020, 3.3.5]

3.4.7 validation team

one or more *validators* (3.4.2) conducting *validation* (3.4.1) activities, supported if needed by *technical experts* (3.3.5)

Note 1 to entry: One person of the validation team is appointed as the *team leader* (3.4.9).

Note 2 to entry: The validation team may be accompanied by validators-in-training.

[SOURCE: ISO 14050:2020, 3.4.23, modified — “validation activities” replaced “a validation”. Notes 1 and 2 to entry added.]

3.4.8 verification team

one or more *verifiers* (3.4.6) conducting *verification* (3.4.5) activities, supported if needed by *technical experts* (3.3.5)

Note 1 to entry: One person of the verification team is appointed as the *team leader* (3.4.9).

Note 2 to entry: The verification team may be accompanied by verifiers-in-training.

[SOURCE: ISO 14050:2020, 3.4.3, modified — “verification activities” replaced “a verification”. Notes 1 and 2 to entry added.]

3.4.9 team leader

person who manages the *validation team* (3.4.7) or *verification team* (3.4.8)

3.4.10 independent reviewer

competent person, who is not a member of the *validation team* (3.4.7) or *verification team* (3.4.8), who reviews the *verification* (3.4.5) or *validation* (3.4.1) activities and conclusions

[SOURCE: ISO 14065:2020, 3.3.8, modified — “validation team or verification team” replaced “validation/verification team”.]

3.4.11 engagement

arrangement between the validation or verification body and its *client* (3.3.1) with the terms to perform services, usually specified in the form of a contract

Note 1 to entry: The word “engagement” is also sometimes used to refer to the activities performed under an engagement, such as a *validation* (3.4.1) or a *verification* (3.4.5), or an agreement to perform *agreed-upon procedures* (3.4.14).

[SOURCE: ISO 14065:2020, 3.3.13]

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3.4.12

assurance

confidence in an *environmental information statement* (3.2.4) that is historical in nature

[SOURCE: ISO 14065:2020, 3.3.14]

3.4.13

assurance engagement risk

risk that the *verifier* (3.4.6) expresses an inappropriate conclusion when the subject matter information is materially misstated

[SOURCE: IAASB, 2014^[25]]

3.4.14

agreed-upon procedures

AUP

engagement (3.4.11) that reports on the results of *verification* (3.4.5) activities and does not provide an opinion

Note 1 to entry: Agreed-upon procedures do not provide *assurance* (3.4.12).

[SOURCE: ISO 14065:2020, 3.3.17]

3.4.15

level of assurance

degree of confidence in the *environmental information statement* (3.2.4)

Note 1 to entry: *Assurance* (3.4.12) is provided on historical information.

[SOURCE: ISO 14065:2020, 3.3.18]

3.4.16

criteria

policies, procedures, or requirements used as a reference against which the *environmental information statement* (3.2.4) is compared

Note 1 to entry: Criteria may be established by governments, regulators, *environmental information programmes* (3.2.5), voluntary reporting initiatives, standards, codes of practice, or internal procedures.

Note 2 to entry: "Criteria" is used in place of "specified requirements" used in ISO/IEC 17029.

[SOURCE: ISO 14065:2020, 3.3.20]

3.4.17

misstatement

error, omission, misreporting or misrepresentation in the *environmental information statement* (3.2.4)

Note 1 to entry: Misstatement can be qualitative or quantitative.

[SOURCE: ISO 14065:2020, 3.3.21]

3.4.18

material misstatement

individual *misstatement* (3.4.17) or the aggregate of actual misstatements in the *environmental information statement* (3.2.4) that could affect the decisions of the *intended users* (3.3.2)

[SOURCE: ISO 14065:2020, 3.3.22]

3.4.19

fraud

intentional *misstatement* (3.4.17) made wrongfully or criminally for financial or personal gain