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Environmental management — Requirements with guidance for verification and validation of water statements

Management environnemental — Exigences et recommandations pour la vérification et la validation des déclarations relatives à l'eau

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**
3.1 Terms related to water information 1
3.2 Terms related to entities involved in water information verification and validation 2
3.3 Terms related to the water statement 3
3.4 Terms related to verification and validation 4

4 Principles **9**
4.1 General 9
4.2 Impartiality 9
4.3 Evidence-based approach 9
4.4 Fair presentation 9
4.5 Documentation 9
4.6 Conservativeness 9

5 Requirements applicable to verification/validation **10**
5.1 Pre-engagement activities 10
5.1.1 General 10
5.1.2 Type of engagement 10
5.1.3 Level of assurance in the case of verification 10
5.1.4 Objectives 11
5.1.5 Criteria 11
5.1.6 Scope 11
5.1.7 Materiality thresholds 11
5.1.8 Language 12
5.2 Verification/validation team selection 12
5.3 Verification/validation activities and techniques 12
5.4 Specific requirements 12
5.4.1 Verifier/validator communication 12
5.4.2 Sufficiency of evidence 13
5.4.3 Intentional misstatement 13
5.4.4 Documented information 13
5.4.5 Process for completing a verification/validation 13

6 Verification **14**
6.1 Planning 14
6.1.1 Strategic analysis 14
6.1.2 Risk assessment 15
6.1.3 Evidence-gathering activities 17
6.1.4 Site visits 18
6.1.5 Verification plan 20
6.1.6 Evidence-gathering plan 20
6.1.7 Approval of verification and evidence-gathering plans 20
6.2 Execution 21
6.3 Completion 21
6.3.1 Evaluation of the water statement 21
6.3.2 Conclusion and draft opinion 21
6.3.3 Verification report 22

7 Validation **23**
7.1 Planning 23
7.1.1 Strategic analysis 23
7.1.2 Materiality thresholds 24

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7.1.3 Estimate testing 24
7.1.4 Assessment 24
7.1.5 Validation plan 27
7.1.6 Evidence-gathering plan 27
7.1.7 Approval of validation and evidence-gathering plans 27
7.1.8 Amendments to validation and evidence-gathering plans 28
7.2 Execution 28
7.2.1 General 28
7.2.2 Evaluation of the water statement 28
7.2.3 Proper disclosure 28
7.3 Completion 28
7.3.1 General 28
7.3.2 Opinion 29
7.3.3 Validation report 30
8 Independent review 30
9 Issuance of opinion and report 31
9.1 General 31
9.2 Types of opinions 31
9.3 Contents of opinion 32
9.4 Issuance of the report 32
10 Facts discovered after the verification/validation 33
Annex A (normative) **Limited level of assurance verifications 34**
Annex B (informative) **Considerations for verification 38**
Annex C (normative) **Agreed-upon procedures (AUP) 41**
Annex D (normative) **Mixed engagement 47**
Annex E (normative) **Competency 48**
Annex F (informative) **Methods to evaluate the competence of verification and validation team members 52**
Annex G (informative) **Relationship between verification and validation competence requirements and skills and abilities needed by verification and validation teams 53**
Annex H (informative) **Example of prerequisite entry level awareness for individuals starting training as team members in a verification/validation team 60**
Annex I (informative) **Personal behaviour 61**
Annex J (informative) **Verification/validation process 62**
Bibliography 64

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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 documents 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 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).

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 Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 2, *Environmental auditing and related environmental investigations*.

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.

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Introduction

0.1 Background

Water is vital for supporting life on Earth. It is important for continued health and wellbeing as well as for a sustainable economy and environment.

Water is a growing global concern. Demand for water continues to rise exponentially because of increasing population, industrial development, energy demands and agriculture. Water supplies are becoming more erratic and uncertain, and degrading water quality can add to this uncertainty. The current rate of water use is unsustainable.

Water is necessary for all ecosystems. In water-stressed countries/regions, during droughts and in areas where water resources are scarce, it is extremely important to ensure access to water supplies. As a result, water stewardship is necessary to sustain the natural water cycle, which is interlinked with the Earth's climate and ecosystems.

Organizations are beginning to evaluate water risk and potential impacts on operations. Financial institutions and investment firms are evaluating climate-change-related business risks and are factoring water risks into investment and credit ratings and in evaluation of green investments.

The importance of water issues is recognized by the United Nations (UN) and reflected in several of the UN Sustainable Development Goals (SDGs). Water management policies are important for achieving global poverty alleviation goals, facilitating climate change adaptation, and expanding international cooperation and capacity-building support in developing countries, and will require implementation of integrated water resources management at all levels, including through transboundary cooperation. Water management policies are important to ensure a sufficient and constant supply of water under increasing scarcity.

Water initiatives related to measuring and evaluation of risks rely on reliable and credible science-based information. This growing need to evaluate and manage water risks requires confidence in water information, and is resulting in a need for verification and validation of water statements.

0.2 Approach of this document

This document provides the requirements and guidance for verification and validation activity, whether used in combination or independently, that can enable a verifier or validator to issue an opinion on a water statement (or agreed-upon procedures findings) that are attributed to any organization, project or normalized unit (e.g. product). Water information that is subject to verification is historical in nature, while validation relates to the outcome of future events. User(s) of this document are responsible for determining how to apply the requirements of this document in relation to the context and type of the applicable water programme.

This document can be used by first-, second- and third-party water information verifiers and validators, which may be an individual or a body. It is regime neutral, meaning that it can be used for verifying and validating water information statements regardless of the criteria used to develop those water statements. Criteria may be based on, for example, governmental agreements, regulatory requirements, voluntary programme requirements or other compliance obligations.

This document provides requirements and guidance for performing verification and validation of water statements. It is intended to be useful to a broad range of users, including:

— first-, second- and third-party water information verifiers and validators;

— organizations and individuals involved in developing and commissioning water projects;

— organizations conducting internal verification and validation of their water statements;

— organizations involved in water information verifier or validator training;

— voluntary and mandatory water programme administrators;

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— investor, finance and insurance communities;

— regulatory agencies;

— organizations involved in accreditation and conformity assessment.

Applications of this document can include but are not limited to verification and validation of:

— water projects in response to climate adaptation and mitigation measures;

— water projects implemented to meet organizational requirements for water conservation, water quality improvement, or improvements in water use efficiency;

— water projects that enhance or restore water flows to benefit critically dewatered sections of rivers, streams and wetlands and to replenish depleted groundwater supplies;

— municipal and corporate water use information;

— water footprint information based on ISO 14046;

— water information normalized by a relevant unit;

— supply chain water information;

— sustainability report water information;

— water information to support water quality credit trading schemes;

— water information as part of local/municipal, regional or national reporting.

The requirements of this document describe a process for providing assurance to intended users that an organization's or project's water statements are complete, accurate, consistent, transparent and without material discrepancies.

This document:

— describes the process and specific requirements necessary for providing confidence in the outcome of verification and validation of water information but includes considerable guidance and flexibility;

— addresses/considers accounting principles which are necessary for providing rigor and confidence in validation and verification results;

— addresses issues relating to materiality or level of assurance, where applicable;

— discusses the use of risk assessment in designing and carrying out verification and validation investigations (which is critical in designing sampling methods and plans, and in evaluating results of investigations).

The document provides specific requirements and guidance for:

— identification of purpose and intent of the engagement (e.g. verification, validation, other);

— identification and agreement on level of assurance, verification/validation criteria, materiality, scope and boundaries;

— strategic analysis to determine timing and required resources for conducting the verification or validation;

— conducting a risk assessment to facilitate development of a verification/validation plan;

— evidence gathering plan, and appropriate sampling methodologies consistent with the type of engagement, criteria for the engagement and the level of assurance required;

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— conducting the verification/validation, including assessing water information and information systems and controls and related support;

— preparing water information verification and validation opinions and reporting results;

— water information verifier/validator competency requirements.

In this document, the following verbal forms are used:

— “shall” indicates a requirement;

— “should” indicates a recommendation;

— “may” indicates a permission;

— “can” indicates a possibility or a capability.

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Environmental management — Requirements with guidance for verification and validation of water statements

1 Scope

This document specifies principles, requirements and guidelines for the verification and validation of water statements.

It is applicable to organizational, product and project water statement verification and validation, and can also be used to provide confidence in reported water information on a local, regional or national level.

This document is programme neutral. If a programme is applicable, requirements of that programme are additional to the requirements of this document.

NOTE Legislation can differ from jurisdiction to jurisdiction. It is the user's responsibility to determine how applicable legal requirements relate to this document.

2 Normative references

There are no normative references in this document.

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 related to water information

3.1.1
water information
information supporting a *water statement* (3.3.3) and pertaining to water characteristics important to the *intended user(s)* (3.2.3) such as accessibility to water resources, water use, *water withdrawal* (3.1.5), water degradation, water quality, water availability and water scarcity

3.1.2
water information system
policies, processes and procedures to establish, manage, maintain and record *water information* (3.1.1)

Note 1 to entry: A water information system can include measurements, spreadsheets, samples, calibration instructions, etc.

[SOURCE: ISO 14064-3:2019, 3.5.1, modified — "water" has replaced "greenhouse gas" and "GHG".]

3.1.3
water project
activity or activities that alter the conditions of a *baseline* (3.3.1) and which cause changes to water characteristics

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3.1.4
water report
report containing *water information* (3.1.1) that has been developed to meet the *requirements* (3.4.16) of *water programme* (3.2.5) or *agreed-upon procedure* (3.4.10)

3.1.5
water withdrawal
anthropogenic removal of water from any *water body* (3.1.7) or from any *drainage basin* (3.1.6), either permanently or temporarily

Note 1 to entry: The term "water abstraction" is sometimes used for this concept.

Note 2 to entry: Water withdrawal typically describes the total amount of water withdrawn from a surface water or groundwater source. Measurements of this withdrawn water can help evaluate demands from domestic, industrial and agricultural users.

[SOURCE: ISO 14046:2014, 3.2.2, modified — Note 2 to entry has been added.]

3.1.6
drainage basin
area from which direct surface runoff from precipitation drains by gravity into a stream or other *water body* (3.1.7)

Note 1 to entry: The terms "watershed", "drainage area", "catchment", "catchment area" or "river basin" are sometimes used for the concept of "drainage basin".

Note 2 to entry: Groundwater drainage basin does not necessarily correspond in area to surface drainage basin.

Note 3 to entry: The drainage area(s) within the scope of *verification* (3.4.1) or *validation* (3.4.2) and the related boundaries are normally defined in the agreement between the *verifier* (3.4.28) or *validator* (3.4.29) and the *client* (3.2.4) and may be specified in legal *requirements* (3.4.16) or water programme requirements.

[SOURCE: ISO 14046:2014, 3.1.8, modified — Note 3 to entry has been replaced.]

3.1.7
water body
entity of water with definite hydrological, hydrogeomorphological, physical, chemical and biological characteristics in a given geographical area

EXAMPLE Lakes, rivers, groundwaters, seas, icebergs, glaciers and reservoirs.

Note 1 to entry: The water body(ies) within the scope of *verification* (3.4.1) or *validation* (3.4.2) and the related boundaries are normally defined in the agreement between the *verifier* (3.4.28) or *validator* (3.4.29) and the *client* (3.2.4) and may be specified in legal *requirements* (3.4.16) or water programme requirements.

[SOURCE: ISO 14046:2014, 3.1.7 modified — Note 1 to entry has been replaced.]

3.2 Terms related to entities involved in water information verification and validation

3.2.1
organization
person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives

[SOURCE: ISO 14001:2015, 3.1.4, modified — Note 1 to entry has been deleted.]

3.2.2
responsible party
person or persons responsible for the provision of the *water statement* (3.3.3) and the supporting *water information* (3.1.1)

Note 1 to entry: The responsible party can be either individuals or representatives of an *organization* (3.2.1), *water project* (3.1.3) or product, and can be the party who engages the *verifier* (3.4.28) or *validator* (3.4.29).

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[SOURCE: ISO 14064-3:2019, 3.2.3, modified — "water" has replaced "GHG".]

3.2.3
intended user
individual or *organization* (3.2.1) identified by those reporting *water information* (3.1.1) as being the one who relies on that information to make decisions

Note 1 to entry: The intended user can be the *client* (3.2.4), the *responsible party* (3.2.2), *water programme* (3.2.5) administrators, regulators, investors, green bond providers, or other interested parties, such as local communities, government departments or non-governmental organizations.

[SOURCE: ISO 14064-3:2019, 3.2.4, modified — "water" has replaced "GHG".]

3.2.4
client
organization (3.2.1) or person requesting *verification* (3.4.1) or *validation* (3.4.2)

Note 1 to entry: The client could be the *responsible party* (3.2.2), *water programme* (3.2.5) administrator or other interested party.

[SOURCE: ISO 14064-3:2019, 3.2.5, modified — "water" has replaced "GHG".]

3.2.5
water programme
voluntary or mandatory system or scheme that develops *requirements* (3.4.16) for managing and reporting *water information* (3.1.1), and providing a *water statement* (3.3.3)

Note 1 to entry: A water programme can be at the international, national or subnational level.

Note 2 to entry: In some cases, an *organization* (3.2.1) may develop its own internal water programme.

3.3 Terms related to the water statement

3.3.1
baseline
situation resulting in quantitative and/or qualitative water characteristics that would have occurred in the absence of a *water project* (3.1.3) and which provides the *baseline scenario* (3.3.2) for comparison with water project water characteristics

[SOURCE: ISO 14064-3:2019, 3.4.6, modified — "greenhouse gas" has been deleted from the term, "situation resulting in quantitative and/or qualitative water characteristics" has replaced "quantitative reference(s) of GHG emissions and/or GHG removals", "water project" has replaced "GHG project" and "water project water characteristics" has replaced "project GHG emissions and/or GHG removals".]

3.3.2
baseline scenario
hypothetical reference case that best represents the conditions most likely to occur in the absence of a proposed *water project* (3.1.3)

Note 1 to entry: The baseline scenario concurs with the water project timeline.

[SOURCE: ISO 14064-3:2019, 3.4.7, modified — "water" has replaced "GHG".]

3.3.3
water statement
factual and objective declaration regarding water characteristics and supported by *water information* (3.1.1) that provides the subject matter for the *verification* (3.4.1) or *validation* (3.4.2)

Note 1 to entry: The water statement could be presented at a point in time or could cover a period of time.

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Note 2 to entry: The water statement provided by the *responsible party* (3.2.2) should be clearly identifiable, capable of consistent evaluation or measurement against suitable *criteria* (3.4.17) by a *verifier* (3.4.28) or *validator* (3.4.29).

Note 3 to entry: The water statement could be provided in a *water report* (3.1.4) or *water project* (3.1.3) plan.

[SOURCE: ISO 14064-3:2019, 3.4.3, modified — "water" has replaced "greenhouse gas" and "GHG". "regarding water characteristics and supported by water information" has been added to the definition. Note 3 to entry has been revised.]

3.4 Terms related to verification and validation

3.4.1
verification
process for evaluating a *water statement* (3.3.3) of historical data and information to determine if the water statement is materially correct and conforms to *criteria* (3.4.17)

[SOURCE: ISO 14064-3:2019, 3.6.2, modified — "water statement" has replaced "statement" twice.]

3.4.2
validation
process for evaluating the reasonableness of the assumptions, limitations and methods that support a *water statement* (3.3.3) about the outcome of future activities

[SOURCE: ISO 14064-3:2019, 3.6.3, modified — "water statement" has replaced "statement".]

3.4.3
verification/validation team
person or persons conducting *verification* (3.4.1) / *validation* (3.4.2) activities

Note 1 to entry: One person of the verification/validation team is appointed as the *team leader* (3.4.4).

[SOURCE: ISO 14064-3:2019, 3.2.8]

3.4.4
team leader
person who manages the *verification /validation team* (3.4.3)

[SOURCE: ISO 14066:2011, 3.1.2]

3.4.5
independent reviewer
competent person, who is not a member of the *verification/validation team* (3.4.3), who reviews the *verification* (3.4.1) or *validation* (3.4.2) activities and conclusions

Note 1 to entry: The independent reviewer may be an employee of the *organization* (3.2.1) which employs the verification/validation team.

[SOURCE: ISO 14064-3:2019, 3.2.9, modified — Note 1 to entry has been added.]

3.4.6
data trail
complete record by which *water information* (3.1.1) can be traced to the primary data

[SOURCE: ISO 14064-3:2019, 3.5.2, modified — "water" has replaced "GHG" and "primary data" has replaced "GHG source".]

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3.4.7
retracing
test (3.4.27) that uncovers errors in *water information* (3.1.1) by following *data trails* (3.4.6) back to primary data

[SOURCE: ISO 14064-3:2019, 3.2.10, modified — "water" has replaced "GHG".]

3.4.8
tracing
test (3.4.27) that is designed to uncover errors in *water information* (3.1.1) by following primary data to water information

[SOURCE: ISO 14064-3:2019, 3.2.11, modified — "is designed to uncover" has replaced "uncovers" and "water" has replaced "GHG".]

3.4.9
engagement
arrangement between two parties, with the terms usually specified in a contract, to perform services

[SOURCE: ISO 14064-3:2019, 3.6.1]

3.4.10
agreed-upon procedures
AUP
engagement (3.4.9) that reports on the results of *verification* (3.4.1) or *validation* (3.4.2) activities and does not provide an *opinion* (3.4.24)

[SOURCE: ISO 14064-3:2019, 3.6.4, modified — "or validation" has been added.]

3.4.11
level of assurance
degree of confidence in the *water statement* (3.3.3)

Note 1 to entry: Assurance is provided on historical information.

[SOURCE: ISO 14064-3:2019, 3.6.5, modified — "water" has replaced "GHG".]

3.4.12
reasonable assurance
level of assurance (3.4.11) where the nature and extent of the *verification* (3.4.1) activities have been designed to provide a high but not absolute level of assurance on historical data and information

[SOURCE: ISO 14064-3:2019, 3.6.6]

3.4.13
limited assurance
level of assurance (3.4.11) where the nature and extent of the *verification* (3.4.1) activities have been designed to provide a reduced level of assurance on historical data and information

[SOURCE: ISO 14064-3:2019, 3.6.7]

3.4.14
material
information capable of influencing the decisions of *intended users* (3.2.3)

[SOURCE: ISO 14064-3:2019, 3.6.8]

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3.4.15
materiality
concept that individual *misstatements* (3.4.21) or the aggregation of misstatements could influence the *intended users'* (3.2.3) decisions

[SOURCE: ISO 14064-3:2019, 3.6.9]

3.4.16
requirement
need or expectation that is stated, generally implied or obligatory

[SOURCE: ISO 14050:2020, 3.1.15]

3.4.17
criteria
policy, procedure or other *requirement* (3.4.16) used as a reference against which the water *statement* (3.3.3) is compared

[SOURCE: ISO 14064-3:2019, 3.6.10, modified — "water" has replaced "GHG".]

3.4.18
controls
responsible party's (3.2.2) policies and procedures that help ensure that the water *statement* (3.3.3) is free from *material misstatements* (3.4.23) and conforms to the *criteria* (3.4.17)

[SOURCE: ISO 14064-3:2019, 3.6.11, modified — "water" has replaced "GHG".]

3.4.19
site
location where an *organization* (3.2.1) carries out work or a service

Note 1 to entry: A site may include one or several *facilities* (3.4.20).

[SOURCE: ISO 14064-3:2019, 3.6.13]

3.4.20
facility
single installation, set of installations or production processes (stationary or mobile), which can be defined within a single geographical boundary, organizational unit or production process

[SOURCE: ISO 14064-3:2019, 3.6.14]

3.4.21
misstatement
errors, omissions, misreporting or misrepresentations in the *water statement* (3.3.3)

[SOURCE: ISO 14064-3:2019, 3.6.15, modified — "water" has replaced "GHG".]

3.4.22
uncertainty
parameter associated with the result of quantification that characterizes the dispersion of the values that could be reasonably attributed to the quantified amount

Note 1 to entry: Uncertainty information typically specifies quantitative estimates of the likely dispersion of values and a qualitative description of the likely causes of the dispersion.

[SOURCE: ISO 14064-3:2019, 3.6.16]

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3.4.23
material misstatement
individual *misstatement* (3.4.21) or the aggregate of actual misstatements in the *water statement* (3.3.3) that could affect the decisions of the *intended users* (3.2.3)

[SOURCE: ISO 14064-3:2019, 3.6.17, modified — "water" has replaced "GHG".]

3.4.24
opinion
formal written declaration provided by the *verifier* (3.4.28) or *validator* (3.4.29) to the *intended user* (3.2.3) that provides confidence on the *water statement* (3.3.3) in the *responsible party's* (3.2.2) *water report* (3.1.4) and confirms conformity with the *criteria* (3.4.17)

[SOURCE: ISO 14064-3:2019, 3.6.18, modified — "verification/validation" has been deleted from the term, "provided by the verifier or validator" had been added and "water" has replaced "GHG".]

3.4.25
nonconformity
non-fulfilment of a *requirement* (3.4.16)

[SOURCE: ISO 14050:2020, 3.1.17]

3.4.26
analytical procedure
evaluation of *water information* (3.1.1) made by an analysis of plausible relationships between water information and non-water data

Note 1 to entry: Analytical procedures evaluate relationships between water information and other data to identify inconsistencies.

[SOURCE: ISO 14064-3:2019, 3.6.20, modified — "water" has replaced "GHG" and Note 1 to entry has been added.]

3.4.27
test
technique used to assess a characteristic of items in a sampled population of *water information* (3.1.1) against *verification* (3.4.1) or *validation* (3.4.2) *criteria* (3.4.17)

[SOURCE: ISO 14064-3:2019, 3.6.21, modified — "water information" has replaced "GHG data and information".]

3.4.28
verifier
competent and impartial person with responsibility for performing and reporting on a *verification* (3.4.1)

[SOURCE: ISO 14064-3:2019, 3.2.6]

3.4.29
validator
competent and impartial person with responsibility for performing and reporting on a *validation* (3.4.2)

[SOURCE: ISO 14064-3:2019, 3.2.7]

3.4.30
inherent risk
susceptibility of an assertion to a *material misstatement* (3.4.23) assuming that there are no related *controls* (3.4.18)

Note 1 to entry: Inherent risk is higher where an assertion is based on complex calculations and lower where an assertion is based on simple calculations. Similarly, inherent risk is higher where an assertion is based on estimates and lower where an assertion is based on factual data.

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3.4.31
control risk
likelihood that the *controls* (3.4.18) of the *organization* (3.2.1) will not prevent or detect a *material* (3.4.14) discrepancy

Note 1 to entry: This risk is a function of the effectiveness of the design and operation of internal controls relating to *water information* (3.1.1).

Note 2 to entry: Control risk is high where data providing the basis for an assertion are manually transcribed and low where data are automatically obtained from measuring equipment and input into a computer database electronically. Some control risk will always exist because of inherent limitations on internal controls.

3.4.32
detection risk
likelihood that the *verifier* (3.4.28) will not detect a *material* (3.4.14) discrepancy that has not been corrected by the *controls* (3.4.18) of the *organization* (3.2.1)

Note 1 to entry: Detection risk is a function of the effectiveness of the evidence gathering procedure and its application by the verifier.

Note 2 to entry: Detection risk cannot be reduced to zero because the verifier usually does not examine all *water information* (3.1.1) in an area and because of other factors such as the possibility that the verifier selects an inappropriate evidence gathering procedure, misapply an appropriate evidence gathering method, or misinterpret the evidence gathering results. These other factors may be addressed through adequate planning, proper assignment of competent personnel, application of professional scepticism, and adequate supervision and review of the work performed. Detection risk relates to the nature, timing and extent of evidence gathering procedures that are determined by the verifier to reduce the risk that *material misstatements* (3.4.23) are not detected to an acceptably low level.

Note 3 to entry: For a given level of verification risk, the acceptable level of detection risk has an inverse relationship to the assessment of the risk of material misstatements. The higher the risk of material misstatement, the lower the level of detection risk that can be accepted.

Note 4 to entry: As well as the risk of the verifier drawing a positive conclusion when *nonconformities* (3.4.25) exist, there is also a risk of the verifier drawing a negative conclusion where no nonconformities exist.

3.4.33
professional scepticism
attitude that includes a questioning mind and a critical assessment of evidence

Note 1 to entry: Further information on professional scepticism can be found in ISAE 3000.

[SOURCE: ISO 14066:2011, 3.1.3, modified — Note 1 to entry has been replaced.]

3.4.34
competence
ability to apply knowledge and skills to achieve intended results

Note 1 to entry: Ability implies exhibiting appropriate personal behaviour when conducting the *verification* (3.4.1) or *validation* (3.4.2).

Note 2 to entry: When defining competence, the following meanings have been applied to the words used:

— knowledge refers to facts and methods, i.e. to know;

— skills mean to carry out in practice, i.e. to do.

Note 3 to entry: This document uses the term “competence” instead of “competency”. The meanings of the terms are differentiated as follows:

— competence is defined as the broad range of knowledge, skills, attitudes and observable behaviour that together comprise the ability to deliver a specified professional service; it also involves adoption of a professional approach that values accountability to the public and leadership in professional practice, the public sector, the corporate sector and education;

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— competency is defined as the particular tasks that competent personnel perform while applying, or bringing to bear, the pervasive qualities and skills that are characteristic of competent personnel to the level of proficiency defined as appropriate by the profession.

[SOURCE: ISO 14066:2011, 3.1.4, modified — Note 2 to entry has been deleted and the subsequent notes renumbered.]

3.4.35
technical expert
person who provides specific knowledge or expertise to the *verification/validation team* (3.4.3)

Note 1 to entry: Specific knowledge or expertise is that which relates to the *organization* (3.2.1), the *water project* (3.1.3) to be verified or validated, or language or culture.

Note 2 to entry: A technical expert does not act as a *verifier* (3.4.28) or *validator* (3.4.29) in the verification/validation team.

[SOURCE: ISO 14066:2011, 3.3.6, modified — Note 3 to entry has been deleted.]

3.4.36
sensitivity
likelihood that the outcome of a study will significantly change based on changes to input variables and methodologies used in the study

4 Principles

4.1 General

The application of principles is fundamental to ensure that water information is a true and fair account. The principles are the basis for, and will guide the application of, the requirements in this document.

4.2 Impartiality

The verification/validation is objective and does not introduce bias.

4.3 Evidence-based approach

The verification/validation engagement employs a rational method for reaching reliable and reproducible verification/validation conclusions and is based on sufficient and appropriate evidence.

4.4 Fair presentation

The verification/validation activities, findings, conclusions and opinions are truthfully and fairly presented. Significant obstacles encountered during the process, as well as unresolved, diverging opinions among verifiers or validators, are reported to the responsible party and the client.

4.5 Documentation

The verification/validation is documented and establishes the basis for the conclusion and conformity with the criteria.

4.6 Conservativeness

When assessing comparable alternatives, a selection that is cautiously moderate is used.

NOTE For further details on conservativeness, see Clause B.8.

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