International

ISO 14064-5

Greenhouse gases —

Part 5: Guidance on activities and techniques used remotely in conducting verification and validation of greenhouse gas statements

Gaz à effet de serre —

Partie 5: Recommandations concernant les activités et les techniques utilisées pour la vérification et la validation à distance des déclarations des gaz à effet de serre

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This document was prepared 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 practices*, and ISO/CASCO, *Committee on conformity assessment*.

A list of all parts in the ISO 14064 series can be found on the ISO website.

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This document provides guidance on risk considerations in cases where greenhouse gas (GHG) verification/validation activities and techniques are carried out remotely, noting that most activities and techniques can be used either in person or remotely.

Relying on evidence gathered remotely can pose unique verification and validation risks (inherent, control and detection). For example, when the verifier/validator is limited in the use of their senses (restricted sight, touch, sound, smell), to assess whether evidence is sufficient and appropriate, detection and control risks can increase. Understanding risks allows them to be managed during verification and validation activities.

The use of information and communication technology (ICT) has become commonplace. Verification and validation bodies (VVBs) routinely employ ICT to communicate with clients and responsible parties and to share information. The sharing of documents in the form of electronic files is more likely to occur than the exchange of paper documents. In short, the work of verifiers and validators is increasingly based on the review and secure storage of digitized information.

Activities and techniques used remotely, such as mobile LiDAR (light detection and ranging) systems, drone surveys, the Sentinel family of satellites and other international satellites are becoming commonly used for gathering GHG-evidence used in verification and validation engagements. In addition, interviews with key personnel are being conducted remotely via virtual meetings or closed-circuit camera views. In some cases, activities and techniques are deployed remotely instead of in-person visits to facility operations.

Many verification/validation bodies are engaged in the planning and execution of verification and validation engagements where some activities and techniques can be applied remotely. This document provides guidance on carrying out verification/validation activities remotely in accordance with ISO 14064-3 and ISO 14065 and promotes a consistent approach for achieving verification/validation objectives. An effective verification/validation engagement using activities and techniques remotely should be adequately planned by a verifier/validator who is competent in using activities and techniques remotely. Such competence is in addition to those requirements for verification and validation teams specified in ISO 14066.

This document provides principles, practices and guidance where GHG verification and validation activities and techniques are employed remotely.

Using this document will help verifiers/validators to identify, minimize and mitigate the unique verification/validation risks associated with the application of activities and techniques used remotely.