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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 Project Committee ISO/PC 308, *Chain of custody — General terminology and models*.

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

Understanding the origin of input materials, product components, product outputs and the conditions under which they are produced is becoming increasingly important. Manufacturers want to demonstrate compliance with requirements regarding health and safety, as well as environmental, social and quality-related aspects, while consumers or other end users need to be able to trust the claims made for these products. The main drivers are government policies, consumer and business demand. Companies directly active in a chain of custody (e.g. manufacturers, traders, logistic and transport service providers, retailers) as well as those investing in such companies (e.g. financial institutions, governments) need transparency to understand and manage risks, to secure quality and to facilitate the implementation of a reliable chain of custody system.

Chain of custody systems have become an indispensable element of many different applications, such as certification schemes for food safety, sustainable agriculture, forestry, aquaculture or fisheries, social compliance, manufacturing, construction and mineral mining. They enable information associated with a product and/or production characteristics to be shared among various organizations active in the chain of custody such as material and ingredient suppliers, processors, contractors, transportation companies, (private or regulatory) scheme owners, financial institutions, companies active in refurbishing and recycling, governmental organizations, end customers, and consumers or other end users.

Although these many systems differ in scope and use terminology relevant to the sector and product-specific needs, and might also diverge on semantics and presentation, they deal with the same challenges and are based on the same range of chain of custody models. The proliferation of systems and definitions causes unnecessary confusion, complexity and inconsistency. It also reduces the degree of trustworthiness of information (e.g. related claims) and increases costs for organizations active in the chain of custody. These complexities and resulting costs can be a barrier to market access, especially for smaller companies and developing countries.

The aim of this document is to provide

- unambiguous definitions of the different chain of custody models, and
- the corresponding requirements, which are independent of sectors, materials, products, and issues addressed.

These requirements are applicable to any organization operating at any step in the supply chain. Chain of custody models are also referred to as "chain of custody methods" or "chain of custody concepts". In this document, the term "chain of custody models" is used to describe the approach taken to control inputs and outputs and associated information in a particular chain of custody system. This multisector globally applicable International Standard serves as a reference point for existing and future commodity or sector specific chain of custody standards.

As each chain of custody model represents a different level of physical presence of the specified characteristic in the output, this document provides general guidance on the application of the defined chain of custody models, including initial guidance on the circumstances under which each chain of custody model might be appropriate.

This document does not specify or recommend a management system. Users can refer to this document, clearly stating which models of chain of custody described in this document are used as a basis in their chain of custody systems.

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Chain of custody — General terminology and models

1 Scope

This document defines a framework for chain of custody by providing:

- a consistent generic approach to the design, implementation and management of chains of custody;
- harmonized terminology;
- general requirements for different chain of custody models;
- general guidance on the application of the defined chain of custody models, including initial guidance on the circumstances under which each chain of custody model might be appropriate.

This document is applicable to all materials and products. It does not apply to services as final outputs.

This document can be used by any organization operating at any step in a supply chain, as well as by standard setting organizations as a reference point for specific chain of custody standards.

This document can enhance the transparency of specific claims regarding materials or products and thereby support the reliability of these claims. It is not intended to be used on its own to make or verify such claims.

This document is not, on its own, able to support claims about an organization's materials or products. This is misleading, especially to consumers and other end customers, as the existence of a chain of custody system alone does not specify the characteristics or the conditions under which materials or products are produced. This document includes requirements and guidance regarding this issue.

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 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 Terms related to chain of custody design

3.1.1

chain of custody

process by which *inputs* (3.2.2) and *outputs* (3.2.3) and associated information are transferred, monitored and controlled as they move through each step in the relevant *supply chain* (3.2.1)