FORM 1:
PROPOSAL FOR A NEW FIELD OF TECHNICAL ACTIVITY

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<th>Circulation date</th>
<th>Reference number: TS/P 296</th>
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<td>2021-02-05</td>
<td>(to be given by ISO Central Secretariat)</td>
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<th>Closing date for voting</th>
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<td>2021-04-30</td>
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| Reference number: ISO/TS/P 296 |

A proposal for a new field of technical activity shall be submitted to the ISO Central Secretariat, which will assign it a reference number and process the proposal in accordance with the ISO/IEC Directives Part 1, Clause 1.5. The proposer may be a member body of ISO, a technical committee, subcommittee or project committee, the Technical Management Board or a General Assembly committee, the Secretary-General, a body responsible for managing a certification system operating under the auspices of ISO, or another international organization with national body membership. Guidelines for proposing and justifying a new field of technical activity are given in the ISO/IEC Directives Part 1, Annex C.

Proposal (to be completed by the proposer)

Title of the proposed new committee (The title shall indicate clearly yet concisely the new field of technical activity which the proposal is intended to cover).

Chain of custody

Scope statement of the proposed new committee (The scope shall precisely define the limits of the field of activity. Scopes shall not repeat general aims and principles governing the work of the organization but shall indicate the specific area concerned).

Standardization in the field of chain of custody (CoC) for products and associated processes with specified characteristics, with the aim of ensuring that associated claims are reliable.

☐ The proposer has checked whether the proposed scope of the new committee overlaps with the scope of any existing ISO committee

☐ If an overlap or the potential for overlap is identified, the affected committee has been informed and consultation has taken place between proposer and committee on
  i. modification/restriction of the scope of the proposal to eliminate the overlap,
  ii. potential modification/restriction of the scope of the existing committee to eliminate the overlap.

☐ If agreement with the existing committee has not been reached, arguments are presented in this proposal (under question 7) as to why it should be approved.
Proposed initial programme of work. (The proposed programme of work shall correspond to and clearly reflect the aims of the standardization activities and shall, therefore, show the relationship between the subject proposed. Each item on the programme of work shall be defined by both the subject aspect(s) to be standardized (for products, for example, the items would be the types of products, characteristics, other requirements, data to be supplied, test methods, etc.). Supplementary justification may be combined with particular items in the programme of work. The proposed programme of work shall also suggest priorities and target dates.)

Proposed initial programme of work

Chain of custody is the process by which inputs and outputs and associated information are transferred, monitored and controlled as they move through each step in the relevant supply chain. Chain of custody processes operate in parallel with regulatory process at borders and international financial transactions, all of which need to operate in close concert to ensure that supply chain actors meet regulatory, transparency and quality requirements.

The draft standard ISO 22095 covers chain of custody across different sectors and approaches to chain of custody and has been recognized as a horizontal deliverable by ISO/CS. Much of the current work in trade facilitation is focused on meeting specific legal and regulatory requirements, such as the harmonized commodity coding system (Harmonized System) for customs. Beyond this specific regulatory space, there is opportunity for voluntary standardization to play a further role in ensuring that specific and defined characteristics of products are maintained and controlled throughout the supply chain.

ISO 22095 ‘Chain of custody – General terminology and models’ was published in October 2020. It is necessarily a general document. The proposed programme of work will include more detailed standards for the following chain of custody models as defined in ISO 22095:

- Identity preserved
- Segregated
- Controlled blending
- Mass balance
- Book and claim

In addition, it is proposed to develop a framework for the assessment of conformity with the standards.

The mass balance and book and claim standards will be the first to be developed continuing the work started in the ad hoc group in 2020. Mass balance implementation methods are widely used in international trade facilitation. Clear ISO standards will enable the shift towards more responsible consumption and production by driving the development of new processes and new raw materials (consistently with United Nations Sustainable Development Goals SDG12 and the European Green Deal).

The first working draft of the mass balance and book and claim standards for CD ballot are likely to be available in 2021. A current draft of the scope and table of contents for the mass balance standard can be found as Annex A to this Form.

The governance of the work will follow a committee structure that is outlined in Annex B.
Indication(s) of the preferred type or types of deliverable(s) to be produced under the proposal (This may be combined with the "Proposed initial programme of work" if more convenient).

The proposer foresees the delivery, principally, of ISO standards in the initial work programme, but the committee might go on to develop documents from the full range of ISO deliverables where appropriate.
A listing of relevant existing documents at the international, regional and national levels. (Any known relevant document (such as standards and regulations) shall be listed, regardless of their source and should be accompanied by an indication of their significance.)

This listing is indicative only, and should not be considered exclusive.

ISO 22095:2020, *Chain of custody – General terminology and models*
ISO 14021:2016, *Environmental labels and declarations – Self-declared environmental claims (Type II environmental labelling)*
ISO 14040:2006 – *Environmental management – Life cycle assessment – Principles and framework*
ISO/IEC 17000 series on conformity assessment, including:
ISO/TS 17033:2019 – *Ethical Claims and supporting information – Principles and requirements*
ISO 34101-3:2019, *Sustainable and traceable cocoa – Part 3: Requirements for traceability*
ISO 34101-4:2019, *Sustainable and traceable cocoa – Part 4: Requirements for certification schemes*
ISO 38200:2018, *Chain of custody of wood and wood-based products*
CEN/TS 16214-2, *Sustainability criteria for the production of biofuels and bioliquids for energy applications – Principles, criteria, indicators and verifiers – Part 2: Conformity assessment*
EN 16751:2016 *Bio-based products - Sustainability criteria*
ISO 15270:2008 *Plastics - Guidelines for the recovery and recycling of plastics waste*

*Sustainability Claims Good Practice Guide. ISEAL Alliance, May 2015*
*A Guide to Traceability - A Practical Approach to Advance Sustainability in Global Supply Chains*, UNGC, 2014

WTO Agreement on Trade Facilitation - there are provisions in this binding agreement that address questions of perishable goods and the coordination of border agencies (including standards bodies).

Other chain of custody requirements and certification scheme documents published by, for example, RSPO, BRC, UTZ, MSC, GMP+, Global G.A.P, FSC, PEFC, RSB, UL, NSF, ISCC, REDcert.
A statement from the proposer as to how the proposed work may relate to or impact on existing work, especially existing ISO and IEC deliverables. (The proposer should explain how the work differs from apparently similar work, or explain how duplication and conflict will be minimized. If seemingly similar or related work is already in the scope of other committees of the organization or in other organizations, the proposed scope shall distinguish between the proposed work and the other work. The proposer shall indicate whether his or her proposal could be dealt with by widening the scope of an existing committee or by establishing a new committee.)

The chain of custody standards proposed in the initial work programme of ISO/TC 308 will cover generic organizational requirements and chain of custody models, and they might or might not be used as a reference or a benchmark for related standards. However, truly to safeguard the horizontal character of the standards developed by ISO/TC 308, a strong structure based on close liaisons with existing committees will be necessary. It is envisaged that ISO/TC 308 will maintain the liaisons that ISO/PC 308 has established with the following ISO Technical Committees:

- ISO/TC 287 Sustainable processes for wood and wood-based products
- ISO/TC 292 Security and resilience
- ISO/TC 298 Rare earth
- ISO/TC 307 Blockchain and distributed ledger technologies
- ISO/PC 315 Indirect, temperature-controlled refrigerated delivery services – land transport of parcels with intermediate transfer
- ISO/CASCO

and will seek to establish liaisons with other relevant committees, for example:

- ISO/TC 34 Food
- ISO/TC 59 Buildings and civil engineering works
- ISO/TC 61 Plastics
- ISO/TC 68 Financial services
- IEC/TC 111 Environmental standardization for electrical and electronic products and systems
- ISO/TC 122 Packaging
- ISO/TC 154 Processes, data elements and documents in commerce, industry and administration
- ISO/TC 176 Quality management and quality assurance
- ISO/TC 207 Environmental management
- ISO/TC 268 Sustainable cities and communities
- ISO/TC 279 Innovation management
- ISO/TC 301 Energy management and energy savings
- ISO/TC 315 Cold chain logistics
- ISO/TC 323 Circular economy
ISO/TC 324 Sharing economy

This list of potential liaisons is indicative and should not be considered exclusive.

<table>
<thead>
<tr>
<th>A listing of relevant countries where the subject of the proposal is important to their national commercial interests.</th>
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<tr>
<td>Australia; Austria; Belgium; China; Denmark; Finland; France; Germany; Hungary; Indonesia; Ireland; Italy; Japan; Korea, Republic of; Mauritania; Mexico; Netherlands; New Zealand; Norway; Saudi Arabia; Singapore; Spain; Sweden; Switzerland; Thailand; United Kingdom; United States</td>
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A listing of relevant external international organizations or internal parties (other ISO and/or IEC committees) to be engaged as liaisons in the development of the deliverable(s). (In order to avoid conflict with, or duplication of efforts of, other bodies, it is important to indicate all points of possible conflict or overlap. The result of any communication with other interested bodies shall also be included.)

It is envisaged that ISO/TC 308 will maintain the liaisons that ISO/PC 308 has established with the following organizations:

- Aluminium Stewardship Initiative
- European Environmental Citizens Organisation for Standardisation
- GS1
- ISEAL Alliance
- United Nations International Trade Centre
- Marine Stewardship Council
- International Nature and Organic Cosmetic Association
- Programme for the Endorsement of Forest Certification
- European Refractories Producers Federation

and will seek to establish liaisons with other relevant organizations, for example:

- Sustainable Packaging Coalition
- UL
- NSF
- ISCC
- RSB
- REDcert
- CORSIA
- The World Customs Organization (WCO)
- UNCTAD
- IFC / World Bank
- International Chamber of Commerce

This list of potential liaisons is indicative and should not be considered exclusive.
A simple and concise statement identifying and describing relevant affected stakeholder categories (including small and medium sized enterprises) and how they will each benefit from or be impacted by the proposed deliverable(s).

Trade facilitation and the harmonization of global supply chains has emerged as a central dynamic in current international supply chains, characterized by multiple inputs and multiple movements of intermediate goods across international borders. Extensive efforts to standardize border procedures, such as customs, sanitary and phyto-sanitary (SPS), have been greatly facilitated by the coming-into-force WTO Agreement of Trade Facilitation. Further efforts on the harmonization of financial systems to ensure transparent and secure movement of funds along the supply chain are also being spearheaded by ISO TC 68, financial services, and international actors, such as the International Chamber of Commerce (ICC). Absent in these efforts is a standardized language and a detailed horizontal approach to clearly describe how the specified characteristics claimed for a material or product (or for the market as a whole) can be assured and product integrity monitored after delivery.

The ISO 22095 generic chain of custody standard series will allow modular use of various related, already-existing standards or internal systems. This means that there is no duplication with the existing sector- or product-specific ISO initiatives or with private standards. The standards will rather serve as a benchmark for identifying the differences between requirements in different standards and certification schemes. They will allow all organizations active in the global supply chain to better address the increasing market demand for transparency and simplify market access by using uniform language and criteria throughout the supply chain.

The benefits are for all stakeholders because they all save time and costs by using the general terminology and chain of custody models:

- Producers in all supply-chains, incl. multinationals and small and medium-sized companies;
- Agriculture, aquaculture and forestry;
- Fishing industry;
- Extraction and mining;
- Manufacturers;
- Retailers;
- Any organization in the full value chain incl. end users, consumers and production industry in general;
- Traders;
- (Border) regulatory agencies (e.g. Customs, SPS)
- Local and national governments;
- NGOs;
- Certification bodies and accreditation bodies;
- Proprietary standards bodies;
- Round table initiatives dealing with requirements for raw materials;
• Investment companies;
• Service providers to chain of custody systems;
• Universities dealing with supply chain management;
• Banks and financial institutions;
• Business and trade associations;
• For-profit and non-profit materials or agricultural products management collectives.

An expression of commitment from the proposer to provide the committee secretariat if the proposal succeeds.

The proposer of this new field of work, ISO/PC 308, has asked NEN to continue the successful collaboration as committee management. NEN is committed to provide the necessary secretariat support of ISO/TC 308 if the proposal succeeds.
Purpose and justification for the proposal. (The purpose and justification for the creation of a new technical committee shall be made clear and the need for standardization in this field shall be justified. Clause C.4.13.3 of Annex C of the ISO/IEC Directives, Part 1 contains a menu of suggestions or ideas for possible documentation to support and purpose and justification of proposals. Proposers should consider these suggestions, but they are not limited to them, nor are they required to comply strictly with them. What is most important is that proposers develop and provide purpose and justification information that is most relevant to their proposals and that makes a substantial business case for the market relevance and the need for their proposals. Thorough, well-developed and robust purpose and justification documentation will lead to more informed consideration of proposals and ultimately their possible success in the ISO IEC system.)

In a world increasingly threatened by fractured trade relations, confidence in supply chains is critical. Trade can only be reliably facilitated when business can have confidence in supply chains. Yet there is currently no ISO/TC with a remit specifically to address supply chain practice, covering chain of custody generically within ISO, although chain of custody models are used by various industries and in various commodity supply chains. This proposal seeks to remedy this lack.

ISO/PC 308 has built a considerable body of expertise in chain of custody and its members have formed a cohesive team that collaborated successfully in the development of ISO 22095. The strong working relationships established will provide a sound basis for building the wider expert community needed to take forward the work of ISO/TC 308.

The proliferation of chain of custody systems and definitions is causing unnecessary confusion and complexity, resulting in misleading marketing, with wrongful claims, and increased costs for consumers, brand-owners and players in different supply chains. This engenders a reluctance in applying chain of custody models to support sustainable production. It might also result in unfair competition and barriers to market access, especially for smaller companies and developing countries.

The proposed set of chain of custody standards, with clear distinctions between them, could enhance transparency of international trade and diminish technical barriers to trade and reduce costs. They could drastically reduce the costs and the loss of time caused by the present variety of chain of custody definitions and systems. This will be relevant especially for small and medium sized companies and involving developing countries in international trade.

Recognizing that the definition of chain of custody requirements can be defined independent of sector, raw material, product, and issue addressed, the proposed set of ISO standards is a multi-sector, globally applicable basis or reference for chain of custody requirements for supply chain actors, which could have, however, sector-specific applications.

Existing systems might refer to this set of International chain of custody standards for the clarification of the differences between the requirements in their system and the chain of custody models specified in this standard. Certification bodies could certify against these standards.

These standards could serve as a benchmark for identifying the differences between requirements in different standards and certification schemes. Being based on currently available best practice, the standards will define chain of custody models and the respective overall physical presence of input material and products in the final output. They will allow organizations to better address the increasing market demand for transparency and simplify
market access by using uniform language and criteria throughout the supply chain. They will also provide clarification and guidance on non-misleading communication and claims.

The initiative to formulate this multi-sector set of ISO standards has been taken by ISO/PC 308 and is strongly supported by its stakeholders, who are convinced that rolling out a set of ISO chain of custody standards will effectively reduce complexity, costs, supply chain risk and unnecessary use of time.

Benefits of further ISO chain of custody standards:

- Independent of sector, raw material and issue (e.g. food safety, sustainability, etc.), where appropriate
- Terms and definitions based on globally accepted ISO language
- Modular use of related ISO and private standards possible and based on available best practice
- Chain of custody requirements for individual supply chain actors
- Could improve acceptance from consumers, NGOs and brand-owners
- Building trust in the provenance of raw materials and products
- Supporting achievement of the UN SDGs, such as Goal 12, Responsible Consumption and Production
- Supporting the realization of the circular economy
- Providing confidence to customers and interested parties

**Signature of the proposer**

Mr. R. Busink,  
Chairman of ISO/PC 308  
Committee Management NEN: energy@nen.nl

Further information to assist with understanding the requirements for the items above can be found in the [Directives, Part 1, Annex C](#).
Draft Title: Mass Balance – Detailed mass balance requirements and guidelines

Introduction

The mass balance model is a chain of custody model in which materials or products with specified characteristics are mixed or co-processed with materials or products without some or all of these characteristics, resulting in a claim on a part of the output proportional to the input.

For example, mass balance can enable a gradual shift from fossil to circular and/or biobased economy to drive a real and positive transformation of the economy. The mass balance chain of custody can be used to support an incremental use of material waste and bio-based content. In that case, fossil feedstock would be replaced within the process.

In order to drive the development of new processes and new raw materials needed for a positive transition to a circular and bio-based economy and overcoming the challenges of segregation of feeds, consistent mass balance methods and calculations are needed to have a clear transparent communication through the value chain, which is possible for consumers to understand.

The credibility of a particular mass balance application is ensured by reliable verification of claims which will be elaborated within the standard.

1 Scope

This standard provides requirements and guidelines for the application of the mass balance chain of custody model defined in ISO 22095 to any material input or process, including how to allocate inputs and outputs to products of such processes.

This standard addresses:
- Allocation of materials inputs,
- System boundaries,
- Granularity level of the system – process, site, group,
- Conversion factors rules (including creation and retirement of credits),
- Traceability principles – depending on the nature of material input,
- Recommendations for the use of mass balance within LCA,
- Communication of claims.
Draft table of contents

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5 General requirements ............................................. Error! Bookmark not defined.
6 Mass Balance at process, site or group level .......... Error! Bookmark not defined.
7 System boundary .................................................... Error! Bookmark not defined.
8 Communication of claims ........................................ Error! Bookmark not defined.
Annex A (informative) e.g. Example of Mass Balance applications .... Error! Bookmark not defined.
Bibliography .............................................................. Error! Bookmark not defined.
Annex B  Potential structure of ISO/TC 308, Chain of custody

Potential Structure for the Chain of Custody Technical Committee

- **WG1**: ISO 22095
- **WG2**: Identity Preserved
- **WG3**: Segregated
- **WG4**: Controlled Blending
- **WG5**: Mass Balance
- **WG6**: Book & Claim
- **WG7**: Conformity Assessment
- **CAG**: Chair’s Advisory Group

Technical Committee
Chain of Custody