Proposal from Japan on the revision of Chain of Custody

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Background

Japan Automobile Standards Internationalization Center

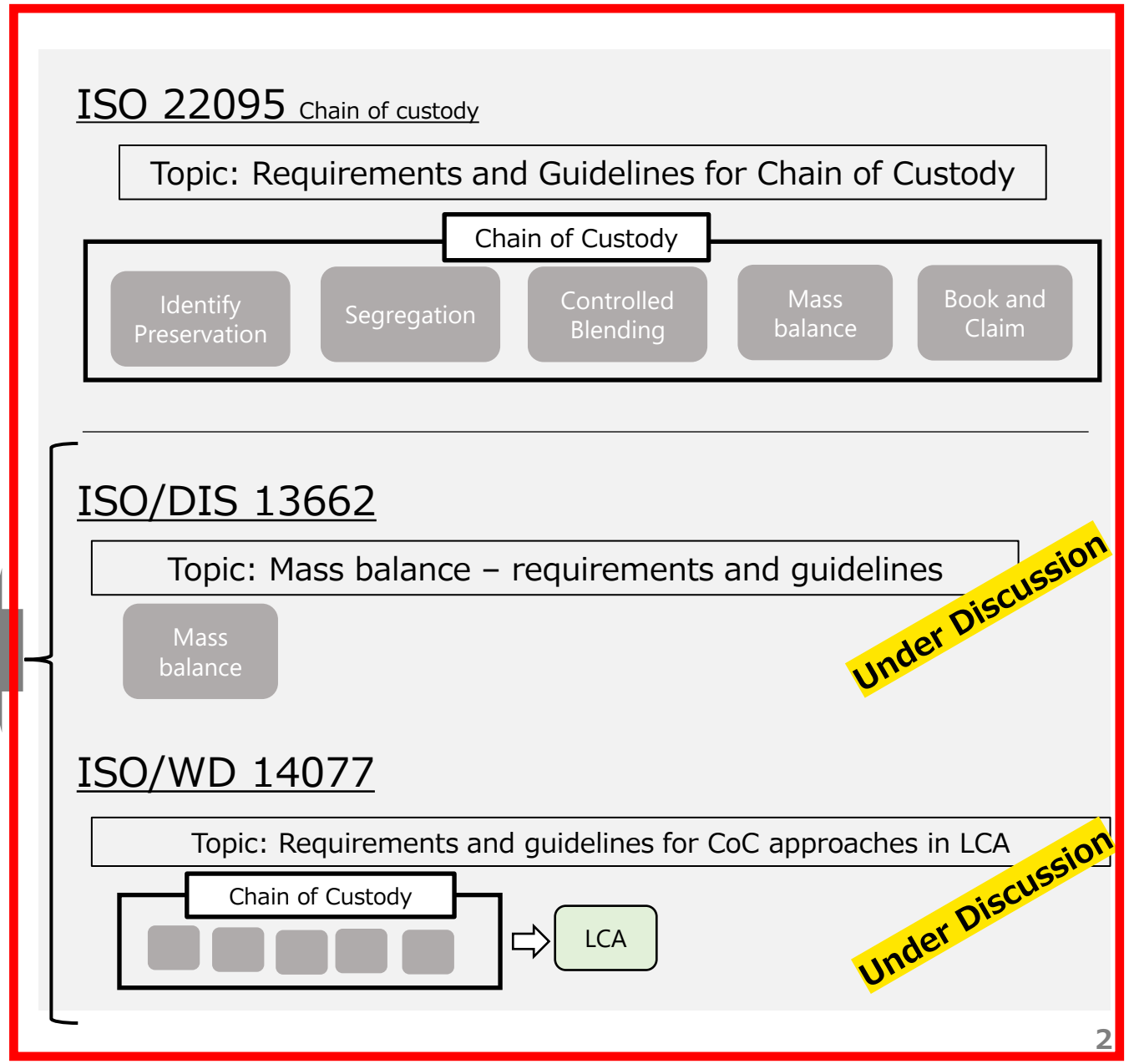
Direction of revision

The concept is ISO compliant

Describes the minimum requirements for methodology

<Comments from the Japanese side>

"We recognize that there are strong requests from industry. However, regarding Mass Balance, international discussions (e.g., ISO) have just started. Considering the current situations, the UN guideline should be generalized instead of establishing the detailed and unique rules at this stage."



Overview of Draft Revisions

Japan Automobile Standards Internationalization Center

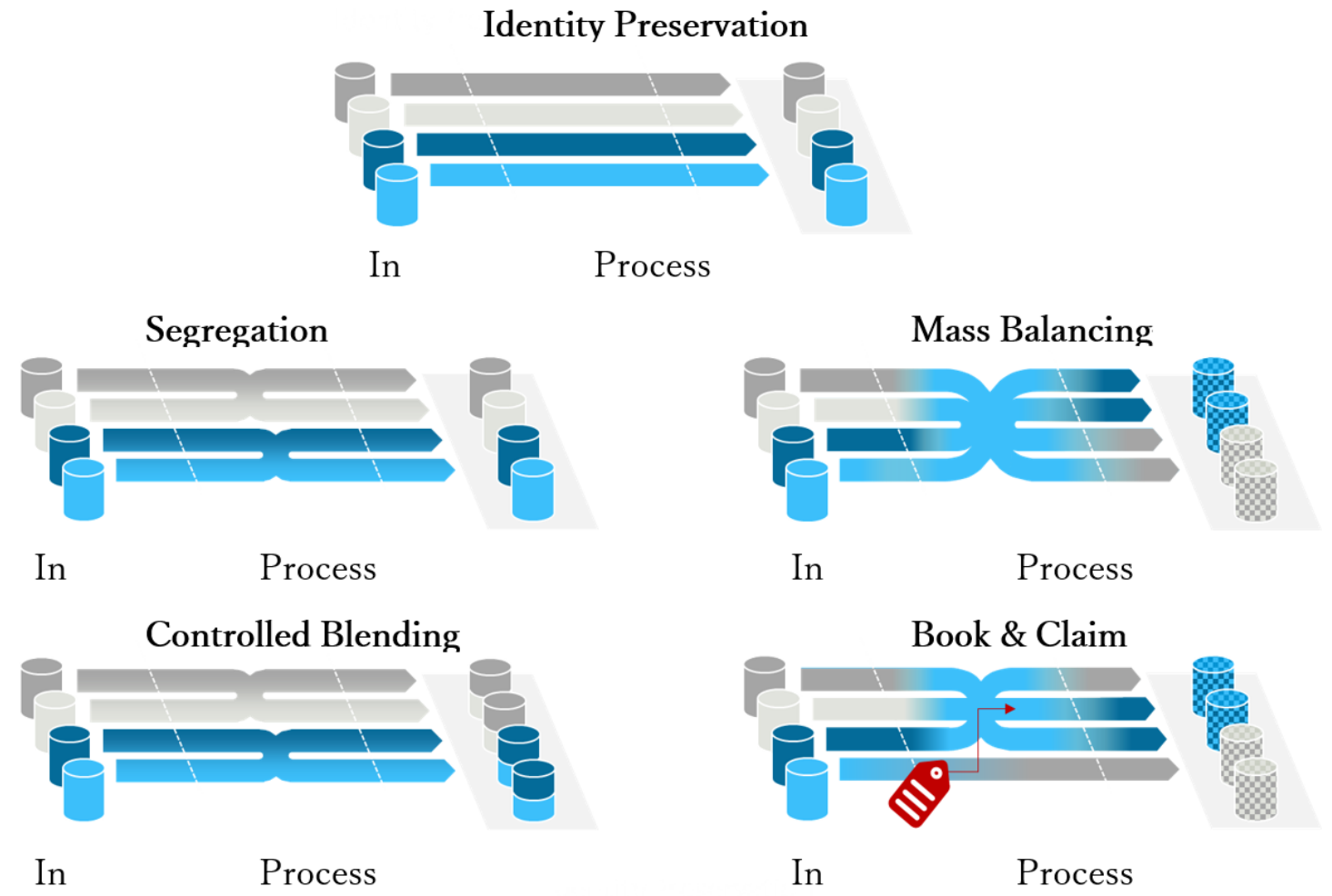
Revision Point	Current (N5)	Revised Version
CoC model	ISO 22095	ISO 22095
Reference to international discussions	Not mentioned	Mentioned
Application of Mass Balance	Not prohibited (Applicable under additional requirements)	Not Prohibited (But clearly states that careful handling is required)
Intended use of Book and Claim	Energy carriers (including electricity, fuels and biomethane)	Electricity (aligned with ISO14067)
General Requirements for CoC	Detailed and specific	Deleted
Requirements for Mass Balance	Detailed and specific	Minimized to the essentials

Chain of Custody Model

Current Version(N5)

Revised Version

Figure 11: Overview of chain of custody models



Reference to international discussions

Japan Automobile Standards Internationalization Center

Current Version(N5)

No reference to international discussions

Added reference

Revised Version

Among these, the Mass Balance model may enable a flexible allocation of environmental attributes; however, in order to ensure transparency and credibility, its application requires prudent consideration. More detailed provisions on Mass Balance are currently under discussion in ISO 13662, while ISO 14077 is addressing its application to LCA.

Accordingly, in automotive LCA, minimum requirements shall be established to prevent diverse interpretations and misuse of Mass Balance. These requirements shall be continuously reviewed and revised, taking into account the developments of global standards such as ISO and the GHG Protocol.

Application of Mass Balance

Japan Automobile Standards Internationalization Center

Current Version(N5)

From the five Chain of Custody models, two shall meet specific requirements when applied in LCAs for automobiles: “Mass balance” and “Book and Claim” (Table 5). In LCA of automobiles, only clearly product-related Chain of Custody Models may be used. Book and Claim may only be applied to energy carriers such as electricity, fuels, and biomethane.

Revised description

Revised Version

Among these, the Mass Balance model may enable a flexible allocation of environmental attributes; however, in order to ensure transparency and credibility, its application requires prudent consideration. More detailed provisions on Mass Balance are currently under discussion in ISO 13662, while ISO 14077 is addressing its application to LCA.

Accordingly, in automotive LCA, minimum requirements shall be established to prevent diverse interpretations and misuse of Mass Balance. These requirements shall be continuously reviewed and revised, taking into account the developments of global standards such as ISO and the GHG Protocol.

Intended use of Book and Claim

Japan Automobile Standards Internationalization Center

Current Version(N5)

From the five Chain of Custody models, two shall meet specific requirements when applied in LCAs for automobiles: “Mass balance” and “Book and Claim” (Table 5). In LCA of automobiles, only clearly product-related Chain of Custody Models may be used. Book and Claim may only be applied to energy carriers such as electricity, fuels, and biomethane.

Changing wording

Revised Version

Accordingly, in automotive LCA, minimum requirements shall be established to prevent diverse interpretations and misuse of Mass Balance. These requirements shall be continuously reviewed and revised, taking into account the developments of global standards such as ISO and the GHG Protocol.

In this resolution, it shall be noted that the Book and Claim model is intended to be applied in the electricity domain, and electricity certificates shall follow Chapter 3.2.15 (Energy modelling).

General Requirements for CoC

Japan Automobile Standards Internationalization Center

Current Version(N5)

Guiding principles and requirements

In implementing chain-of-custody methods, including mass balancing/book and claim, the following set of guiding principles shall be fulfilled:

1. The use of chain-of-custody approaches shall achieve significant changes and an effective transition towards a more circular, more bio-based and lower GHG emissions production in complex value chains.
2. The choice and implementation of chain-of-custody approaches and models shall be transparent, clear, credible, and verifiable – abiding by relevant standards such as ISO. Proof must be submitted by the organization using the certificate.
3. Labels and claims referring to chain-of-custody controlled specified characteristics and used on products shall fulfil the following requirements:
    a. description of the chain-of-custody approaches and models
    b. accurate and appropriate implementation of the chain-of-custody model
    c. compliant with existing standards and regulations
    d. non-misleading

If the "specified characteristic" content in products cannot be measured and verified, labels and claims shall mention this. For example, this often applies to mass balancing (e.g., chemically recycled content in plastics).

4. No double counting: A reliable accounting system shall be installed at each operating site to ensure that the claimed volume on the output side exactly matches the actual volume on the input side within the declared time and regional scope. These periods shall not exceed the defined reporting period (max. 1 year).

Deleted

Revised Version

There are no requirements described for all CoC models.

Requirements for Mass Balance

Japan Automobile Standards Internationalization Center

Current Version(N5)

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In implementing chain-of-custody methods, including mass balancing/book and claim, the following set of guiding principles shall be fulfilled:

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Additional requirements for a mass balance/book and claim chain of custody approach:

1. The operating sites in the spatial boundaries for mass balancing are under the operational control of the same company/corporate group/joint venture.
2. It shall be technically possible according to standard industry practice to produce a mass-balanced product from an alternative feedstock. The share of the balanced input shall not exceed the maximum technically possible share for this process route (e.g. Blast furnace vs. Electric arc furnace route for steel).
3. Applied emissions factors for the mass-balance system boundaries shall be product and process specific

4. Only additional measures relative to the PCF of the residual product shall be considered. The residual product is the product without reduction measures used in mass balance within the respective reporting year.
5. Physical traceability of the material in the supply chain: By default it shall be possible for portions of the material to be physically present in the product.
6. Technical equivalence: The product must possess the same technical properties as the equivalent product without applied measures.
7. In certain cases, the implementation of chain of custody within complex or geographically distributed production systems may require additional flexibility. Under specific conditions, regionally aligned approaches to mass balance accounting may be considered, provided that they uphold equivalent levels of credibility, verification, and transparency as site-specific methods. Such approaches shall be subject to independent third-party certification or verification and shall remain aligned with the overarching principles of consistency, avoidance of double counting, and technical plausibility.

Simplified

Simplified

Simplified

Revised Version

Requirements for Mass Balance

1. This model shall correspond to "Mass Balance" as defined in ISO 22095:2020.
2. This model shall only be applied when a physical connection exists between input and output.
3. This model shall be operated under the management of the same company, corporate group, or joint venture.
4. This model shall be operated under accounting controls that the claimed output exactly matches the actual input, avoiding any double counting.
5. The reliability of this model shall primarily be ensured through third-party certification, and at a minimum, an equivalent independent and transparent scheme shall be required.
6. When the environmental attributes of products using this model are claimed, clear and transparent information shall be provided to stakeholders.