Team of Specialists on Environmental, Social and Governance Traceability of Sustainable Value Chains in the Circular Economy - Second Session
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UN/CEFACT Supply Chain Cross-Industry Track & Trace Project Update

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The mission of this project: Where is the product at any time?

- Enable tracking and tracing of products (or assets) and information sharing in **standard** electronic format.
- Track and trace any **traded and identified items** including transport equipment or assets (e.g., box, pallet, container, etc. … even empty!).
- Scope: Logistic services which transport the traded goods between the **seller** and the **buyer**.
Track & Trace Project
Current Status and Deliverables

• Information gathering phase: Green Paper compiling concepts, scenarios, and use cases for all primary modes of transport - completed (82 pages)

Formal DELIVERABLES of the project:

• Published:
  • White Paper: “Integrated Track and Trace for Multi-Modal Transportation” presented to the 27th UN/CEFACT Plenary in April 2021

• Completed:
  • Business Requirements Specification (BRS), detailing the Business Processes of Cross Industry Track and Trace
Challenges and opportunities

- Numerous stakeholders can be involved in a single journey
- End users have increasing expectations due to technological progress (e.g., Block Chain, Linked Data and API)
- Emergence of many IoT digital data streams offering more visibility (smart containers, RFID, etc.)
- It is not possible to impose the usage of the same unique identifier to all logistic chain actors through consolidation and deconsolidation events
- *Trade transactions may involve many different trade items*
- Not every needs to or is allowed to know all the data along the logistics value chains
Trade and Transport identity disconnects

Starting point

Will transport incorporate trade IDs?

NO, only some by transport service buyer of the original seller/consignor

How to solve?

Create a collection of events carrying the connected IDs

Pass the IDs (links) through the transport value chain
Events to CONNECT the different IDs

1. Packing
2. Consolidation
3. Combining consignments
4. Loading consignment onto transport means
5. Unloading consignments from transport means
6. De-Consolidating Consignments
7. Shipment splitting event

Transport execution events may affect product quality or safety (invalidating previous certification).

  e.g., Temperature limits exceeded, shock, tilt, fumigation etc.
Transport & Logistics link to Certification
Sustainable Product Initiative (SPI) Regulation

• Proposal adopted 30 March 2022 by European Commission

• **Aim:** Reduce the life cycle environmental impacts of products

• Digital Product Passport covers *any physical good, including components and intermediates products, placed on the EU market or put into service.*

• “Digital Product Passport means *a set of data specific to a product* that includes the information (specified in the delegated act) and that is accessible via electronic means through a data carrier”

• **Open, global standards referenced by the draft regulation**
  - Product identifier, Operator identifier, Facility identifier

• *All information included in the product passport shall be based on an open standard, developed with an interoperable format and shall be machine-readable, structured, and searchable*

• More information on DPP; [EUCircularTalks](#); [GS1 article](#); [EU SPI Q&A](#); [EU law site](#);
Key messages

- Reuse existing global data standards for linking identifiers and event structures
- Accept decentralised identifiers for the shipment, the consignment and their movements.
- UN/CEFACT MMT RDM already contains all required data elements
- Combining existing global data standards in concert with using new digital technologies make it now possible to fix the trade-transport disconnect and move closer toward operational and systems interoperability.