

41st UN/CEFACT Forum - Bangkok

ESCAP-ADB/ROC-TF Workshop: Emerging Developments and Opportunities in Green Trade Facilitation



Dr. Hanane BECHA
Vice Chair, Transport & Logistics



41st UN/CEFACT FORUM

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T&T scopes towards supporting ESG goals



Visibility of **transport assets**
Smart Containers project



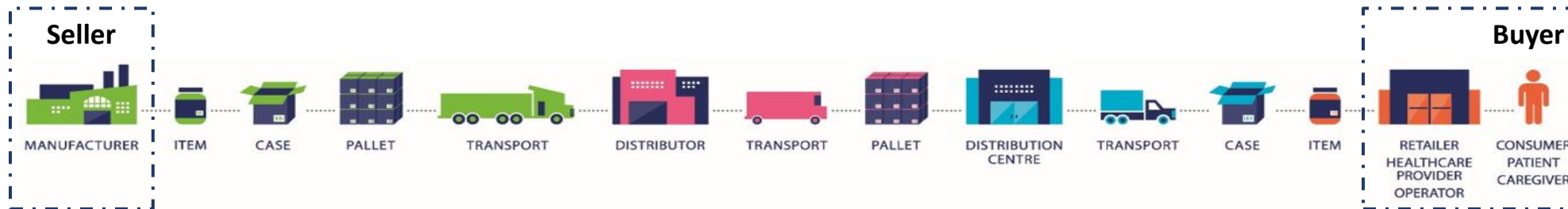
Visibility of **goods/products** being multi-modal transported from seller to buyer
Cross Industry Supply Chain T&T UN/CEFACT project



Visibility of the ESG conditions under which **products** were made, and where they were made (especially raw materials).
e.g., working conditions, use of chemicals.
Sustainable textile and leather traceability and transparency project
Product Sustainability Data becomes vital (e.g., EU DPP)



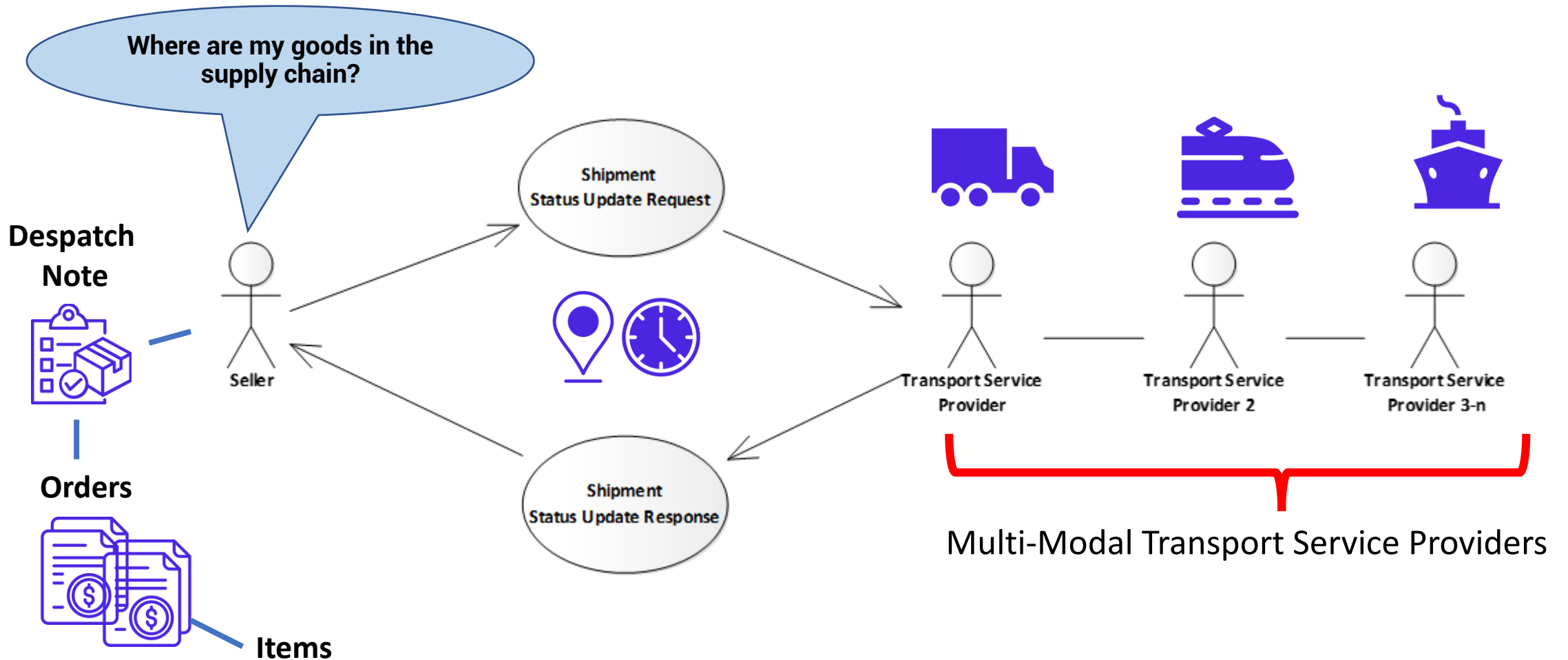
Cross Industry Supply Chain Track & Trace Project



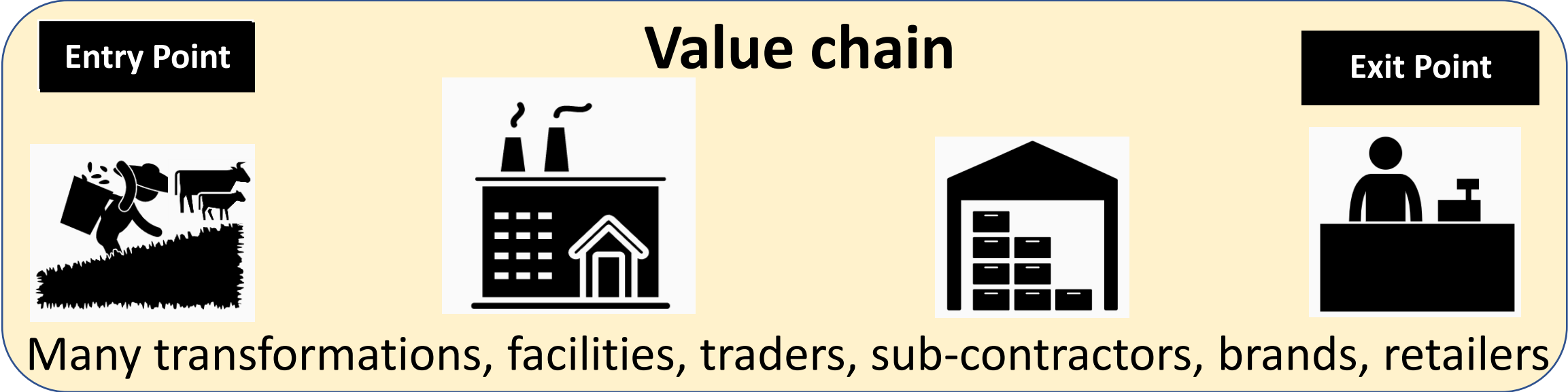
The mission of this project: Where is the product at any time?

- 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!).
- Logistic services: transport the traded goods between the *seller* and the *buyer*.

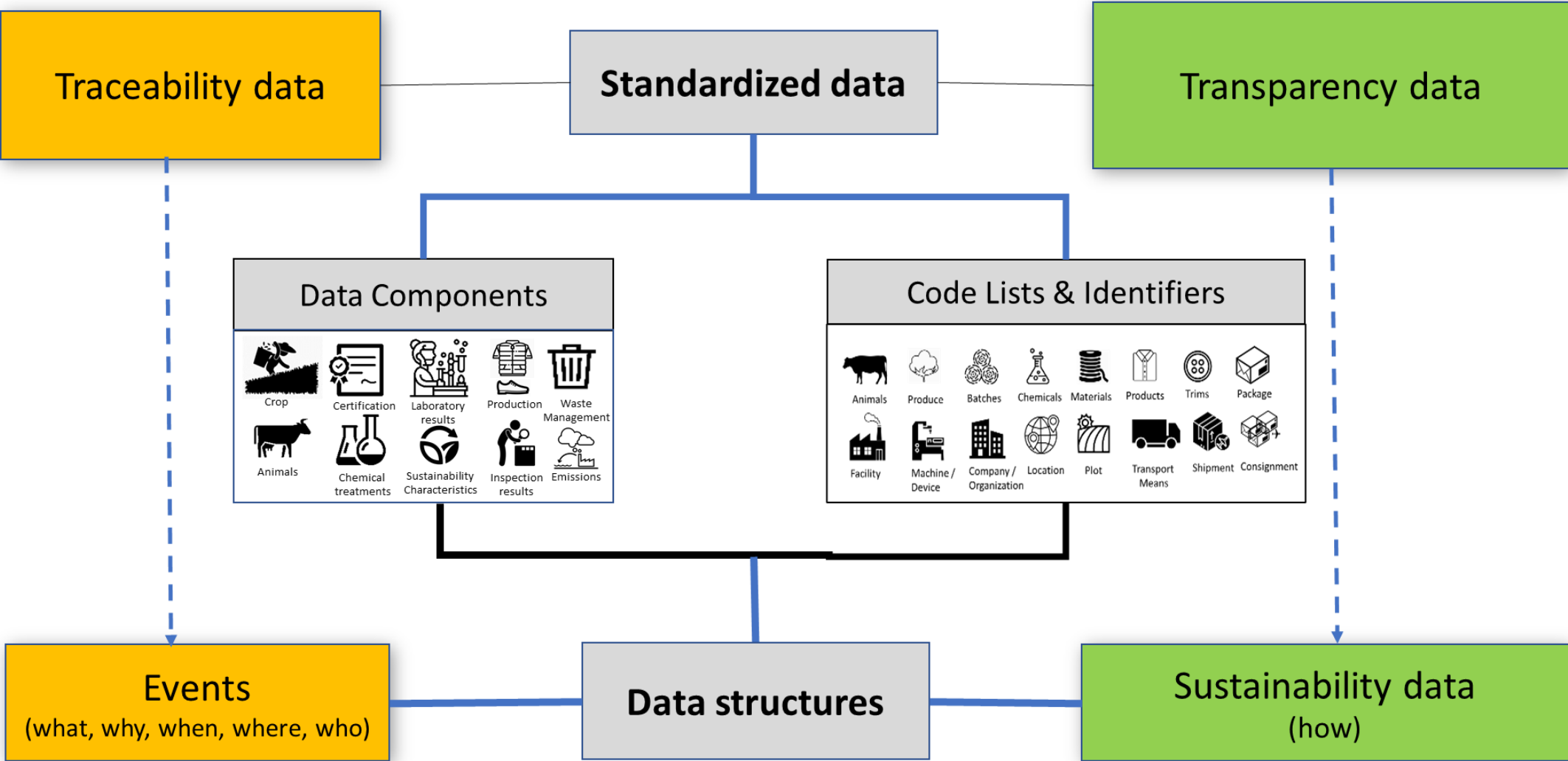
Visibility of goods between seller and buyer



There is a need for supply chain visibility



Standardized data components supporting traceability & transparency



Challenges and opportunities

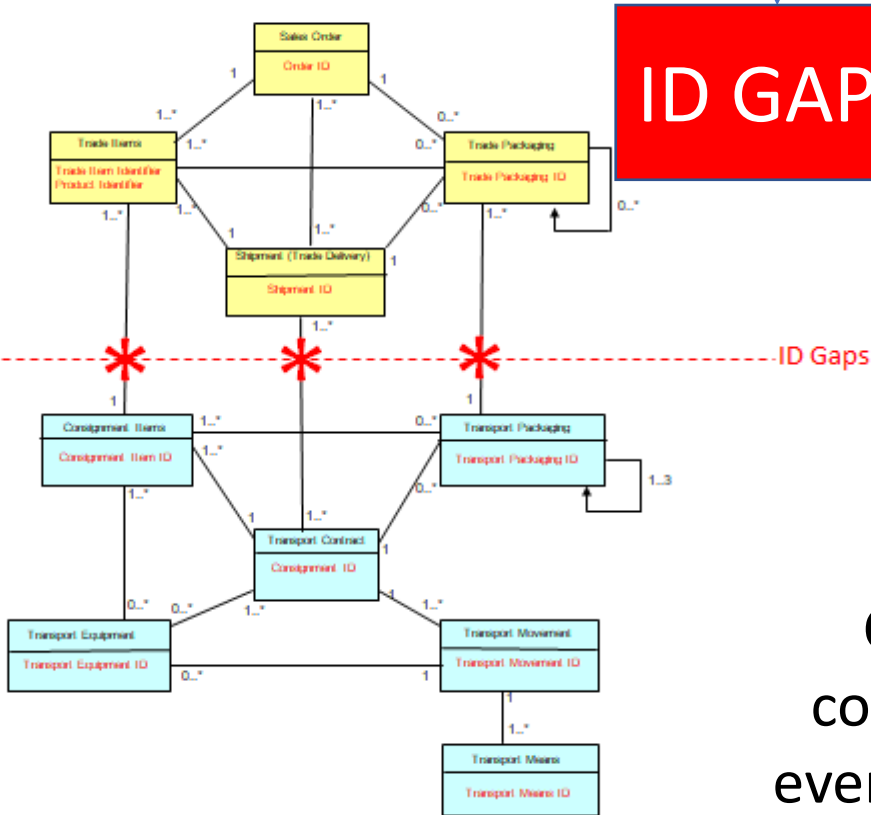
- Numerous stakeholders, large amount of information and multiple modes can be involved in a single journey
- End users and competent authorities have increasing expectations due to new regulations and technology progress
- Emergence of many digital data streams offering more visibility (smart containers, RFID, etc.)
- It is not possible to impose the usage of the same unique identifier across all logistic chain actors
- Many scenarios defining relationship of traded items, logistic units, transport and means of transportation (consolidation, de-consolidations, incident, etc.)

Transport events can provide information on:

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

Trade and Transport identity gaps

Starting point



ID GAPS

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 different IDs

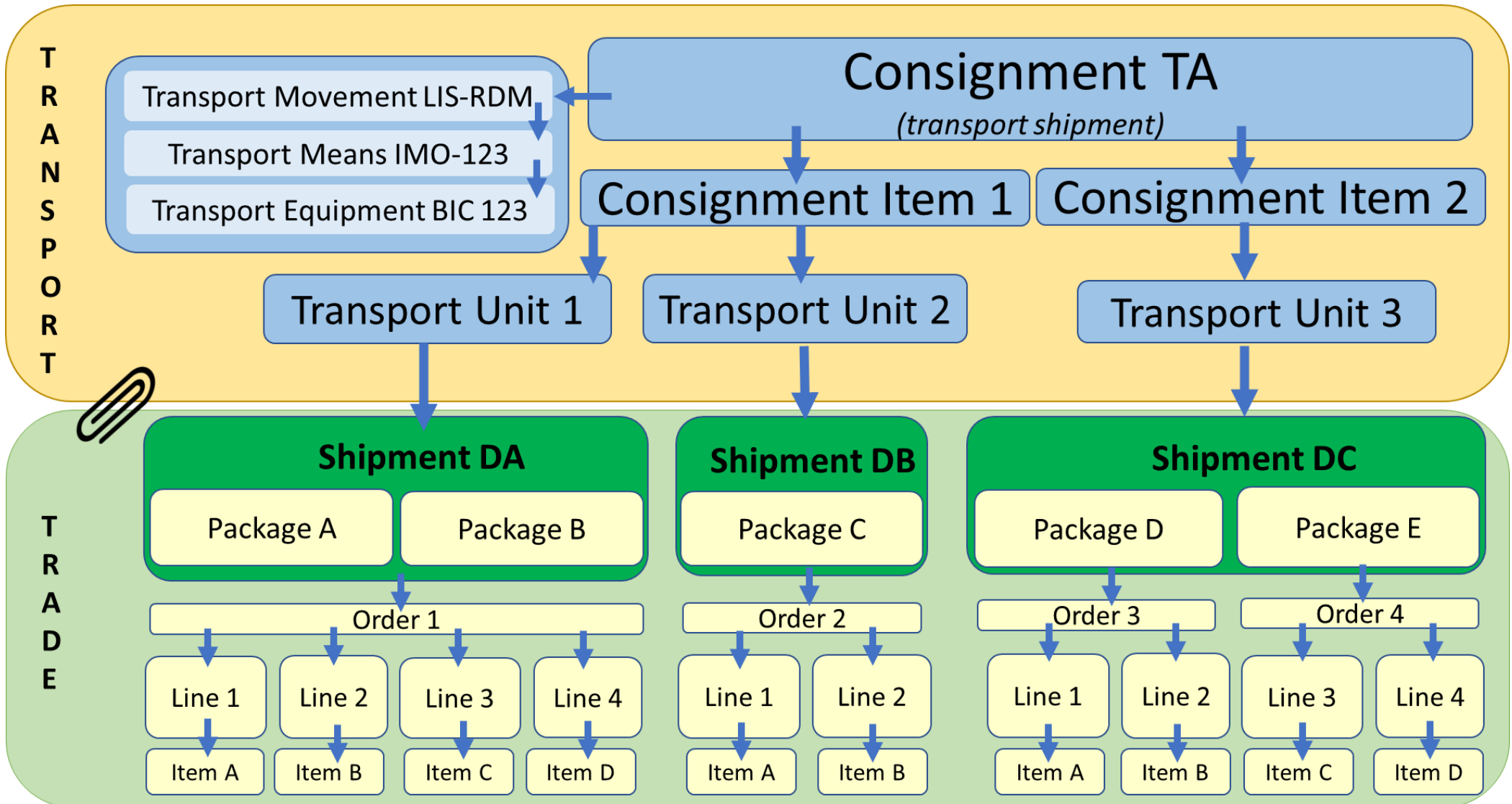
Pass the IDs (links) through the transport value chain

Trade
B2B Data
World

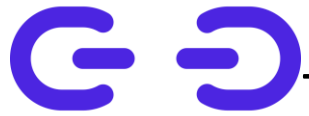
Transport
B2B Data
World

ID Gaps

Bringing worlds together: trade and transport



Why is integrated T&T difficult?



The **disconnect** between trade and transport views for the goods being transported using different modes of transport.
e.g., Tracing the goods offer evidences of the place of origin of the products supporting ESG goals.



Stakeholders involved in trade and transportation of goods **use terms and definitions in different ways.**
e.g., consignments versus trade deliveries (trade shipments)

Semantic anchors help to solve the disconnects

Integrated T&T using semantic anchors

Shipment (Trade Delivery)

A shipment is an identifiable collection of one or more Trade Items (available to be) transported together from the Seller (Original Consignor/Shipper) to the Buyer (Final/Ultimate Consignee):

A Shipment can only be destined for **one Buyer**

A Shipment can be made up of some or all Trade Items **from one or more Sales Orders**

A Shipment can have only one Customs UCR

A shipment may form part or all of a Consignment or may be transported in different Consignments.



Consignment (Transport View)

A consignment is a separately identifiable collection of Consignment Items (available to be) transported from one Consignor to one Consignee via one or more modes of transport as specified in one single transport service contractual document:

A Consignment can only have one Transport Service Buyer

A Consignment can only have one Transport Service Provider

A Consignment can only have **one Consignor**

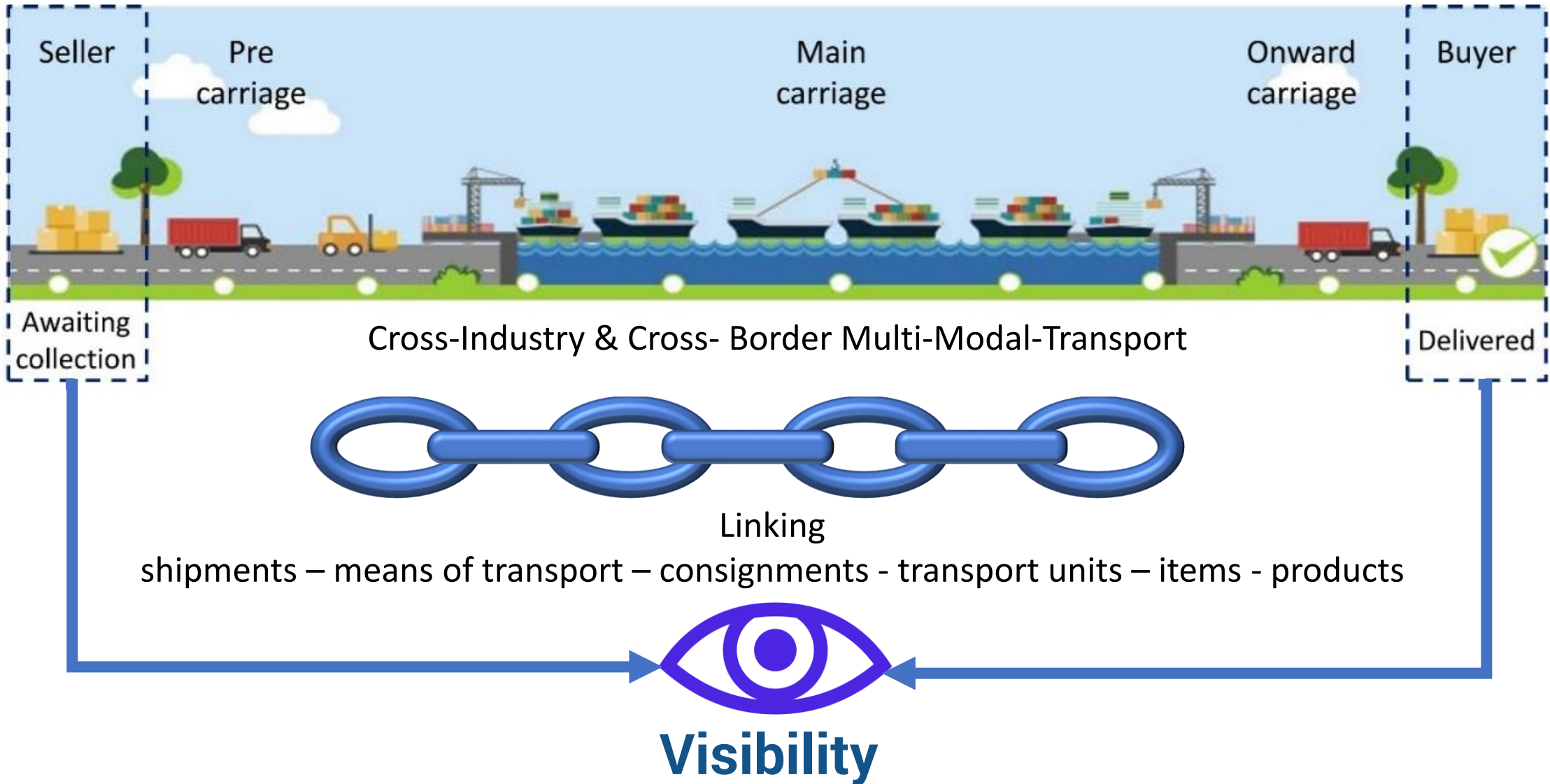
A Consignment can only have **one Consignee**

The Transport Service Buyer can be either the Consignor or the Consignee

A Consignment is made up of **one or more Consignment Items**

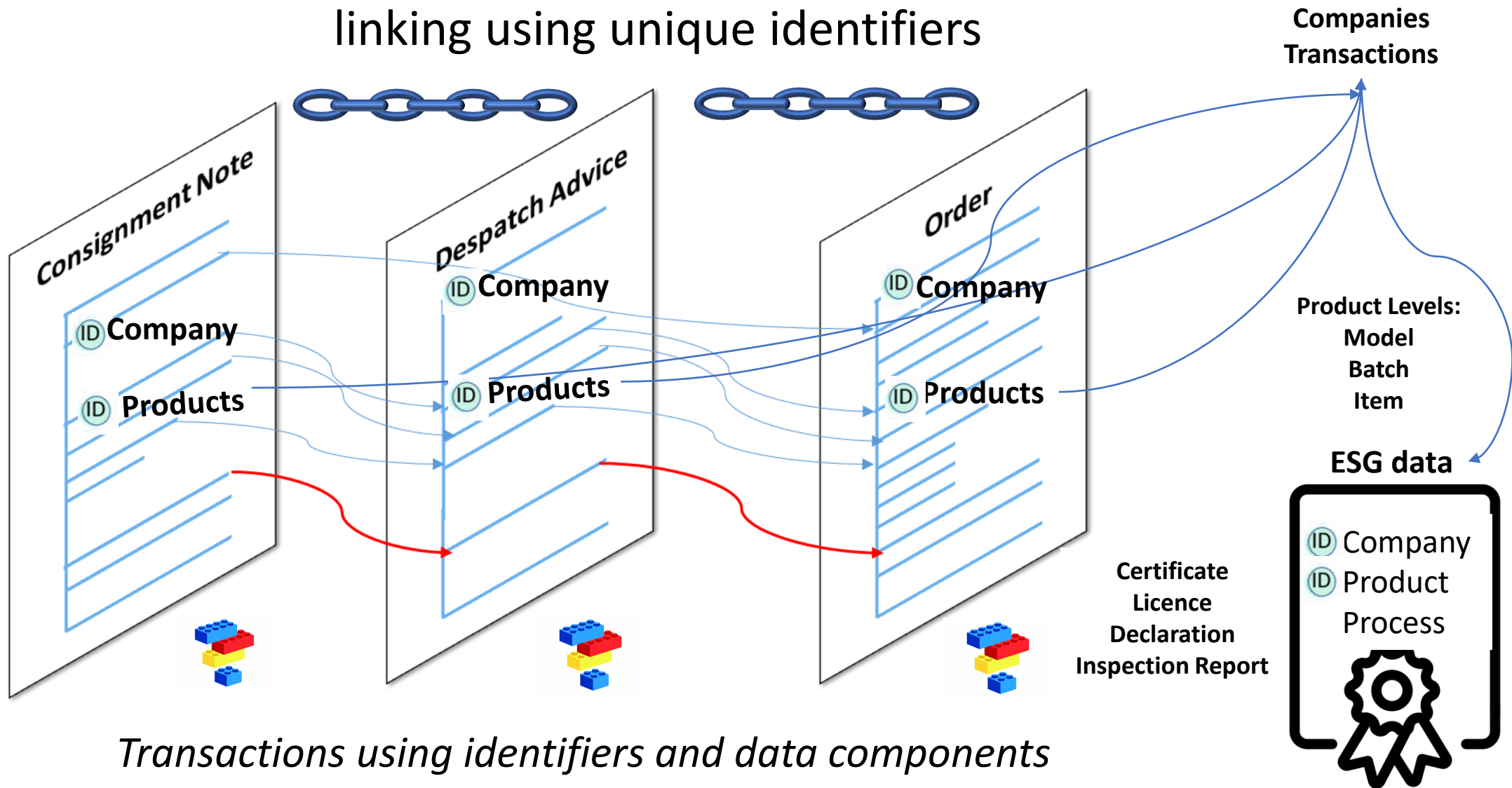
A Consignment can be made up of some or all Trade Items (aggregated into Consignment Items) from one or more Shipments

Common terms and linking data is key



Transactions data and ESG related data

linking using unique identifiers

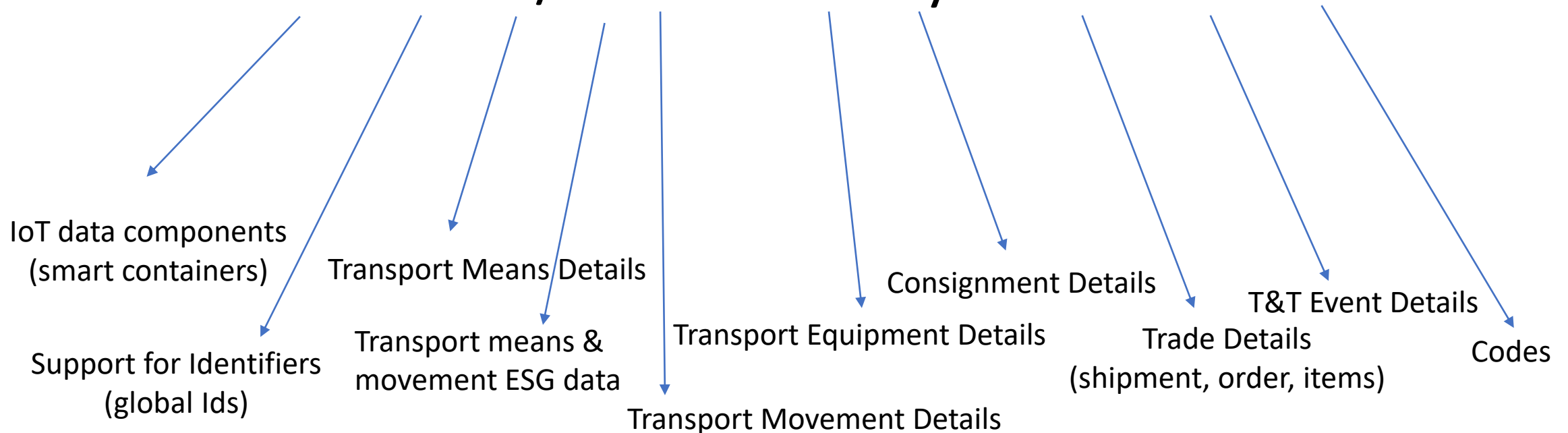


Transactions using identifiers and data components

Integrated T & T Project: conclusion

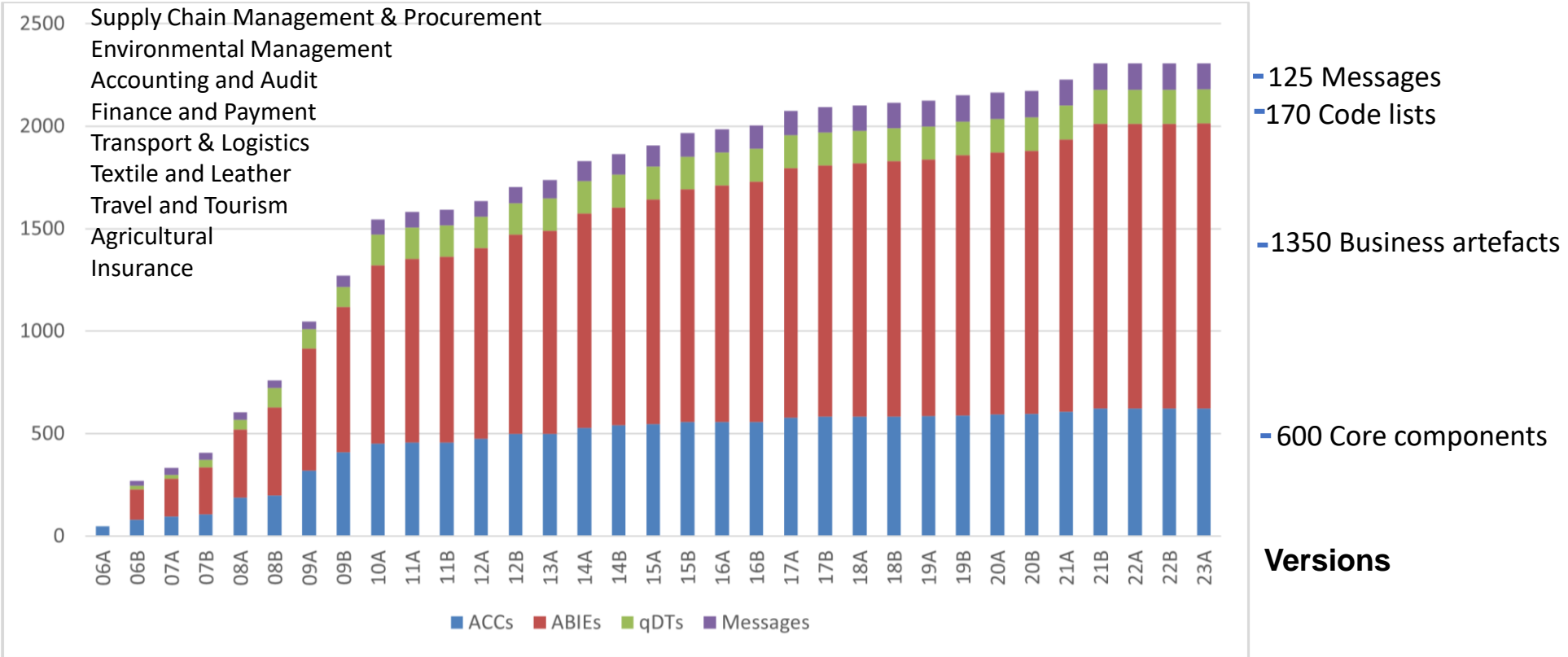


All of the data elements required for supply chain track and trace are already in the UN/CEFACT Library.



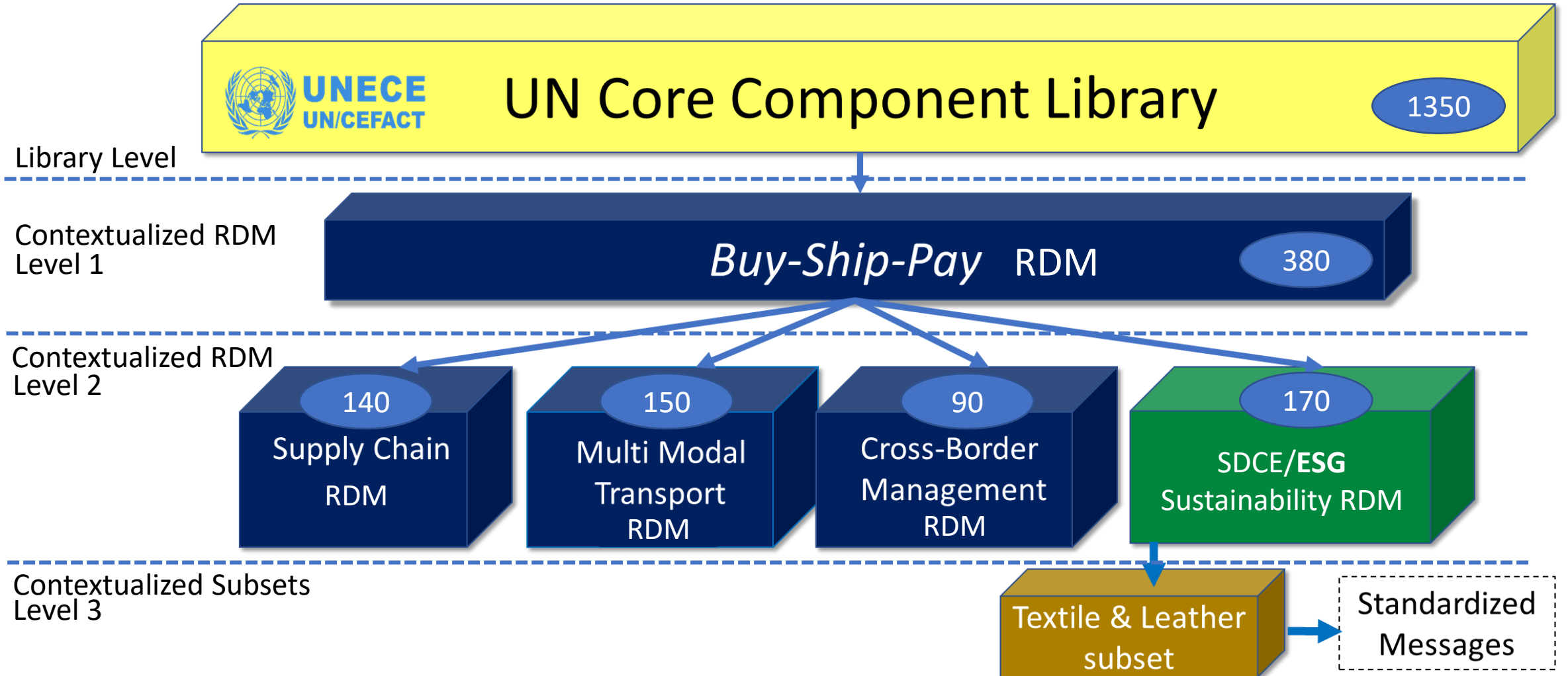
The UNCCCL the basis of all: contains data components for T&T and ESG

A library with more than 15000 data elements



ABIE - Aggregate Business Information Entities - ACC - Aggregate Core Component qDT - Qualified DataType

Providing a framework of standardized data



T & T and Transport related ESG data

Reefer Monitoring
Reduced loss of goods

CO2 emissions monitoring

Custom clearance
Reduction inspection delays

Cargo security
Reduction of theft, counterfeiting

Container terminal congestion monitoring

Reduction of buffer stock and stock in transit

Reduction of delivery time and cargo loss

Process compliance
Reduction of fine occurrence

Our key messages

- Decentralized identifiers – accepting different IDs, as long the identifier is associated with a recognized standards body. This is referenced today in the UN/CEFACT MMT-RDM
- UN/CEFACT MMT-RDM already contains all required data elements
- Combining existing data elements in concert with using new digital technologies make it now possible to close the trade-transport gap and move closer toward operational and systems interoperability.
- Reuse of existing international open standards as much as possible!



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ESCAP

Economic and Social Commission
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Thank you!

Dr. Hanane BECHA

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hbecha@gmail.com

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