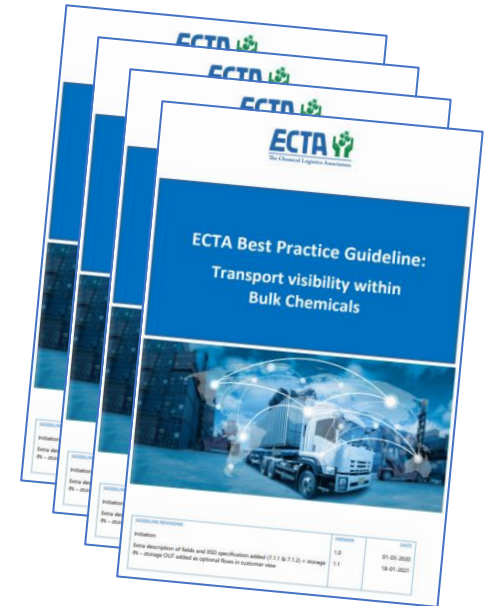


ECTA DIGITALIZATION WEBINAR

June 28 2023:

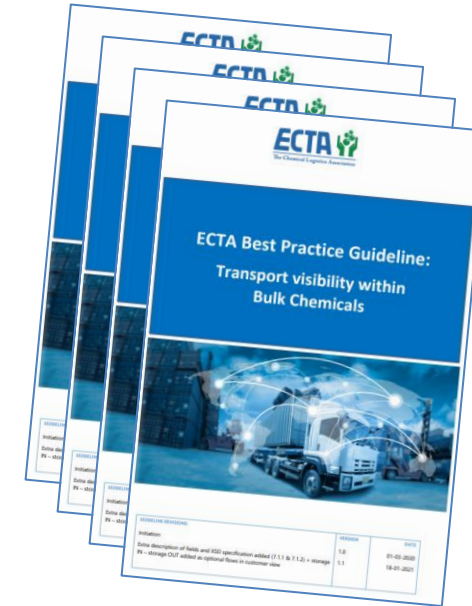
**HOW TO ENABLE AUTOMATED DATA
EXCHANGE IN BULK CHEMICAL LOGISTICS**



28.06.2023 HOW TO ENABLE AUTOMATED DATA EXCHANGE IN BULK CHEMICAL LOGISTICS

Agenda

- | | |
|---|--|
| 1. Introduction & poll questions | Peter Devos (ECTA) |
| 2. Intro to the ECTA digital Best Practice guidelines | Johanna Klaßen (Hoyer)
Linda Krielaart (Van Den Bosch)
Cedric Walti (Bertschi) |
| 3. Webinar discussion on implementation experiences and FAQ | All |
| 4. Wrap-up | Peter Devos (ECTA) |



Meeting rules

1. Do's and don'ts – no commercial contents, reminder of EU Competition Law requirements
2. Because of the high number of participants, we request all (except for the speakers / panel members) to communicate via the chatbox of the meeting.
3. Please all mute your microphones and block your cameras to facilitate a smooth meeting and ensure the best connectivity during the meeting.

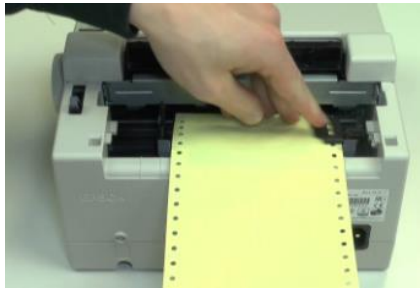
Your pre-questions/concerns at a glance

- How to get to a more "standard" way of data sharing between all logistics actors working digitally together?
- How to gain more insight in operational practices and ongoing developments in transport visibility and Orders-to-Cash data?
- How to protect data and resolve the fear of data you don't want to share?
- How to better align the transport visibility expectations between shippers/IT vendors and carriers?
- How to speak the same language between carriers and IT partners?

ECTA DIGITALIZATION WEBINAR



10.000 years



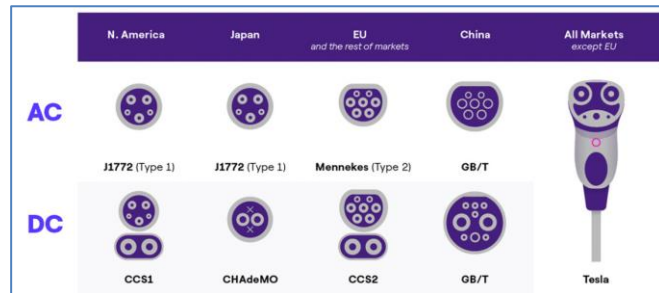
1980.....from “distribution of paper” to “distribution of data (subsets)” 2030

REVOLUTION in BUSINESS COMMUNICATION – BUSINESS CONNECTIVITY – MODERN DIGITAL COLLABORATION

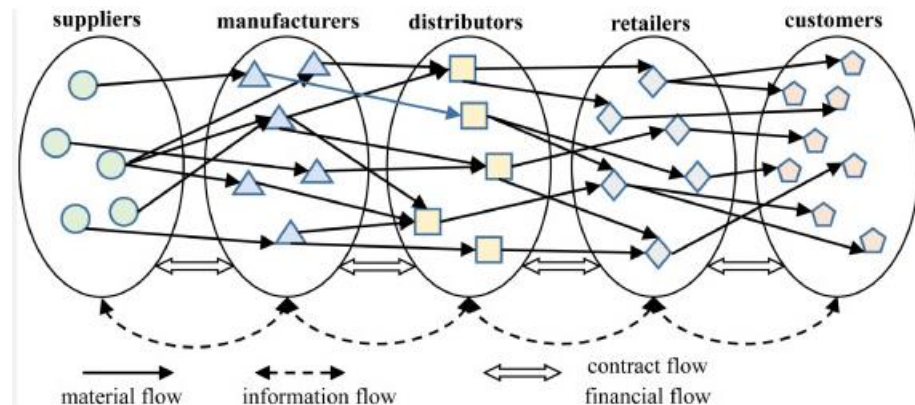
NEED for extra DATA COMMUNICATION GUIDELINES & RULES to improve DECISION MAKING

Connectivity complexity in communications

Visible connectivity complexity



Invisible transport and logistics connectivity complexity



Intro: ECTA digitilization work group

ECTA's digital Best Practice guidelines since 2019

ECTA BEST PRACTICE GUIDELINE: TRUCK & DRIVER DATA STANDARDS

[Read Article](#)

ECTA BEST PRACTICE GUIDELINE: TRANSPORT INVOICING DATA STANDARDS WITHIN BULK CHEMICALS

[Read Article](#)

ECTA BEST PRACTICE GUIDELINE: EQUIPMENT MASTER DATA

[Read Article](#)

ECTA BEST PRACTICE GUIDELINE: TRANSPORT ORDER DATA STANDARDS WITHIN BULK CHEMICALS

[Read Article](#)

ECTA BEST PRACTICE GUIDELINE: DIGITAL DOCUMENTS ECMR AND EEC

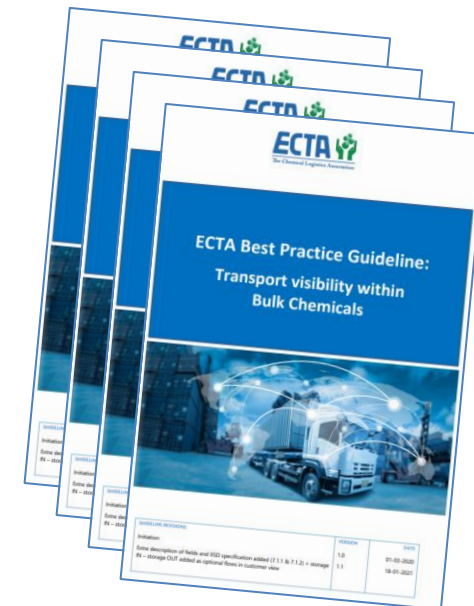
[Read Article](#)

ECTA BEST PRACTICE GUIDELINE: TRANSPORT VISIBILITY KPI FRAMEWORK FOR SUPPLIER DATA QUALITY

[Read Article](#)

ECTA TRANSPORT VISIBILITY BEST PRACTICE GUIDELINE

[Read Article](#)



ECTA DIGITILAZATION WORKGROUP WEBINAR PLAN 2023

HOW TO ENABLE AUTOMATED DATA EXCHANGE IN BULK CHEMICAL LOGISTICS

LEARN FROM IMPLEMENTATIONS

Webinar 1: 28.06.2023 - Focus on transport order data – transport visibility data and transport order invoicing data standards

Webinar 2: Q3 2023 – Focus on equipment and truck and truck driver data standards

Webinar 3: Q4 2023 – Focus on e-document (eECD-eCMR) data standards

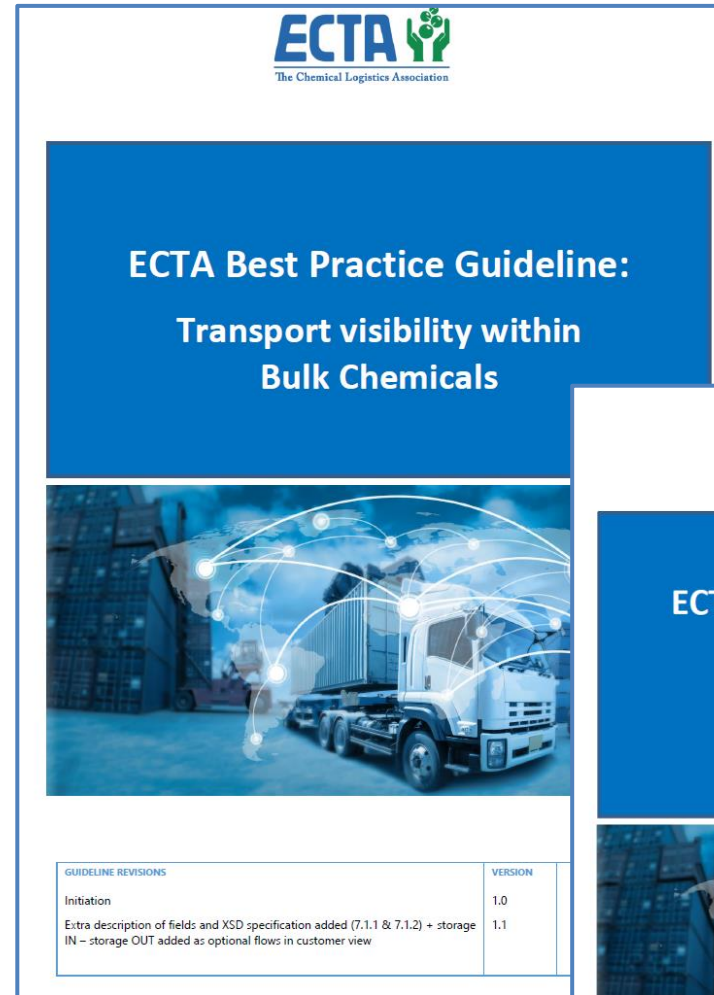
ECTA



SLIDO


Intro to the ECTA digital Best Practice guidelines

- Challenges
- Objective of the guidelines
- Work group partner
- Result & achievements
- Learning & current status

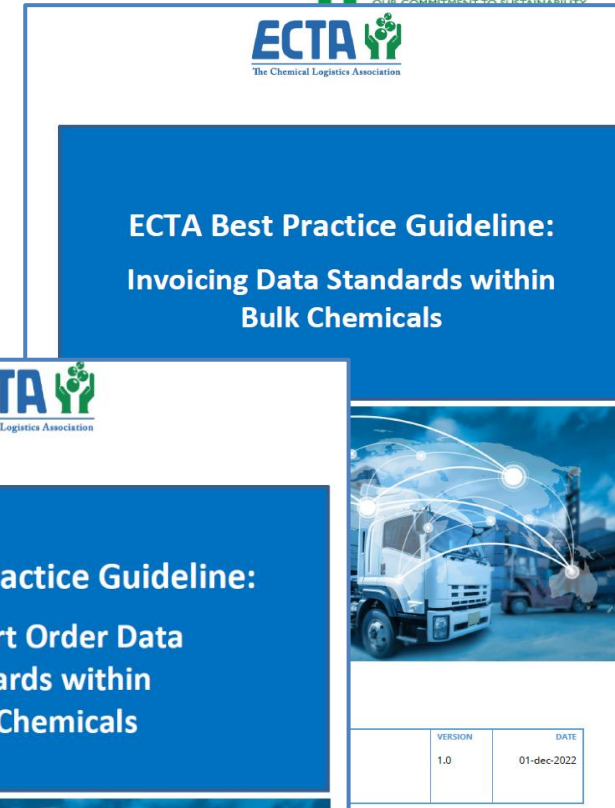


ECTA
The Chemical Logistics Association

ECTA Best Practice Guideline:
Transport visibility within Bulk Chemicals




GUIDELINE REVISIONS	VERSION
Initiation	1.0
Extra description of fields and XSD specification added (7.1.1 & 7.1.2) + storage IN – storage OUT added as optional flows in customer view	1.1




ECTA
The Chemical Logistics Association

ECTA Best Practice Guideline:
Invoicing Data Standards within Bulk Chemicals



VERSION	DATE
1.0	01-dec-2022



ECTA
The Chemical Logistics Association

ECTA Best Practice Guideline:
Transport Order Data Standards within Bulk Chemicals



GUIDELINE REVISIONS	VERSION	DATE
Initiation	1.0	01-12-2021

Challenges

- The industry currently uses a **variety of standards** (e.g. ANSI X12, ASCII, CIDX, EDIFACT, etc.)
- higher demands on the **knowledge** and training of the technical staff **implementing** and **maintaining** these **interfaces**.
- problems caused by **general free text fields** and the **unstructured data** in it.
- **Mandatory** and **optional data** fields are not unambiguously defined
- Non-standard messages require an **individual setup** and **mapping** of the data in the edge systems.
- Different semantics and definitions are used, leading to an **increased need for communication** when establishing a new connection.
- The master data used in the various partner systems are not at the same level everywhere. **Inconsistent or missing master data** at the sender side leads to **manual completion or correction** of data elements at the data receiver side.
- Not all partners have the same resources and know-how to implement interfaces for automated data exchange.

Objectives of the guidelines

3/2020



Transport Visibility within Bulk Chemicals

12/2021



Transport Order Data Standards within Bulk Chemicals

12/2022



Invoice Data Standards within Bulk Chemicals

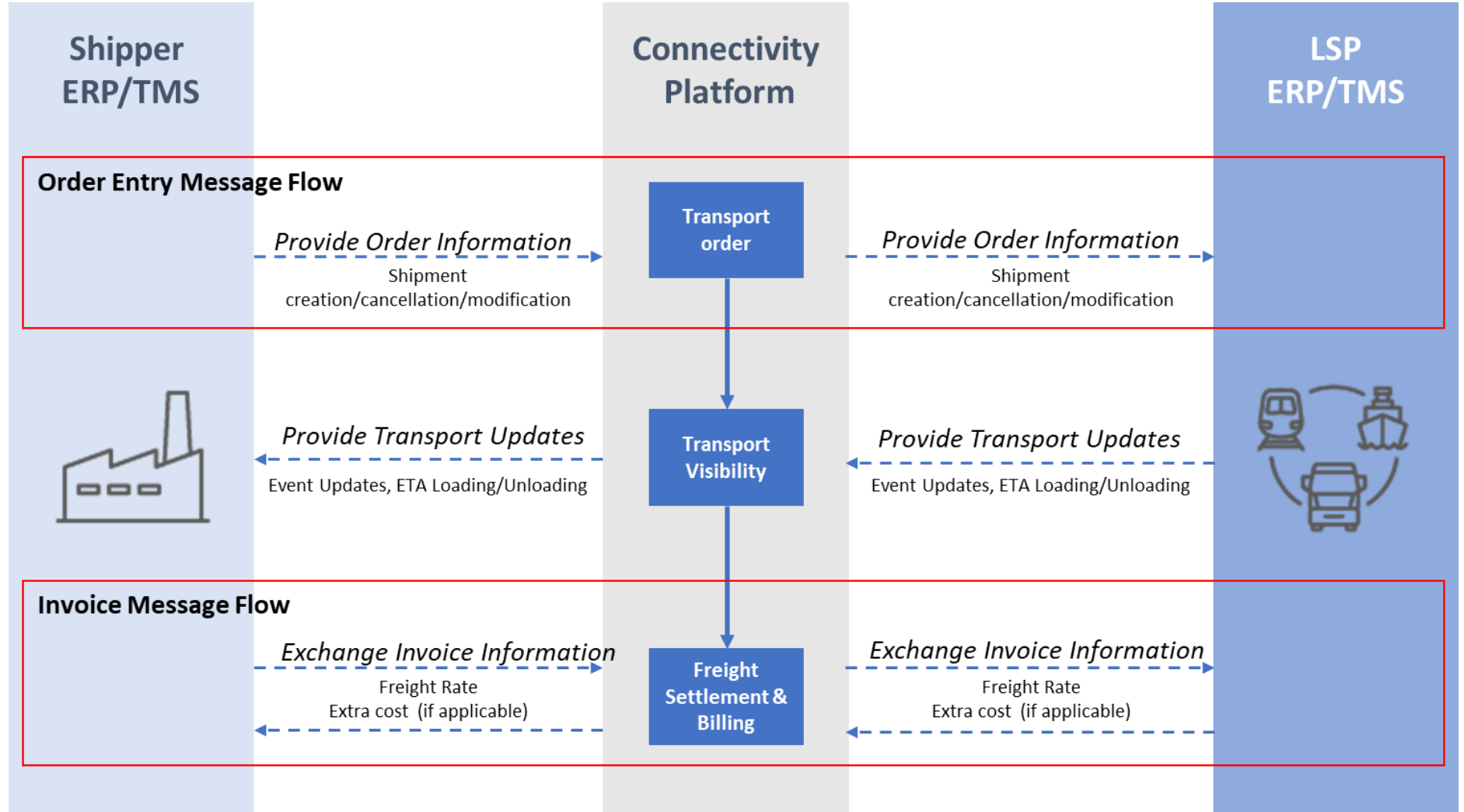
In general:

- **Strengthen** the chemical **bulk transport industry's** ability to send and receive data across the parties in the industry
- Provide the foundation for a clear and **structured data exchange** within chemical bulk supply chains
- Ensure interoperability by using a shared data language, preferably inspired by **existing standards** and **aligned with the industry processes and actors.**

In particular:

- Define **mandatory** and **optional data fields** and therewith avoid unstructured data (free-text-information) in visibility, order and invoice data exchange
- Provide **standardized sample XML messages** for visibility, order and invoice data for current interface standardization work and future initiatives.

Transport Visibility



Transport Visibility within Bulk Chemicals

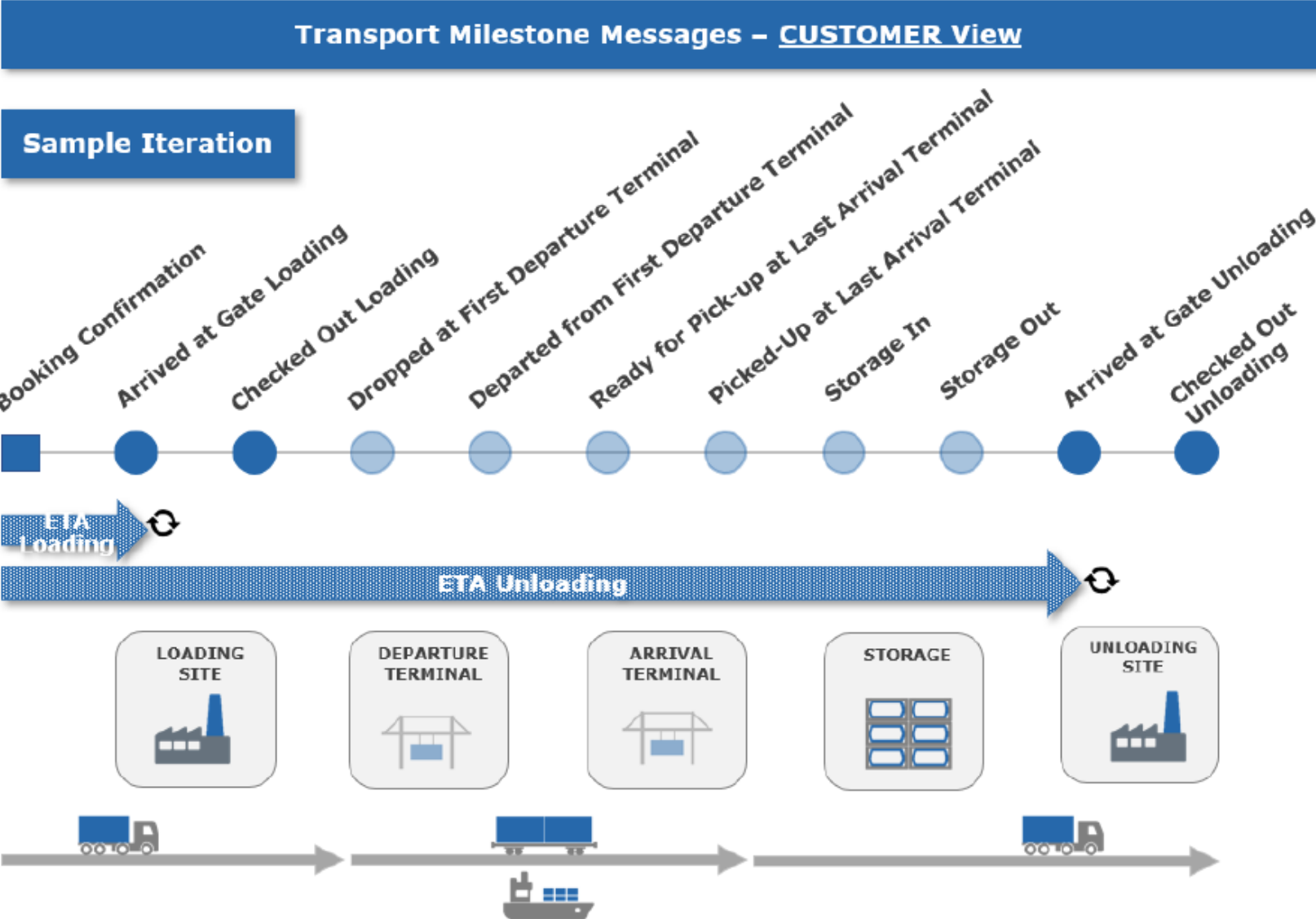
- Collaborative framework for various supply chain actors
- Defined transport milestone events and ETx update messages
- Mandatory and optional content of electronic update messages
- EDI (xml) and API (json) as recommended data exchange formats

Work group partner

- Association 
- Logistics Service Providers



Transport visibility framework



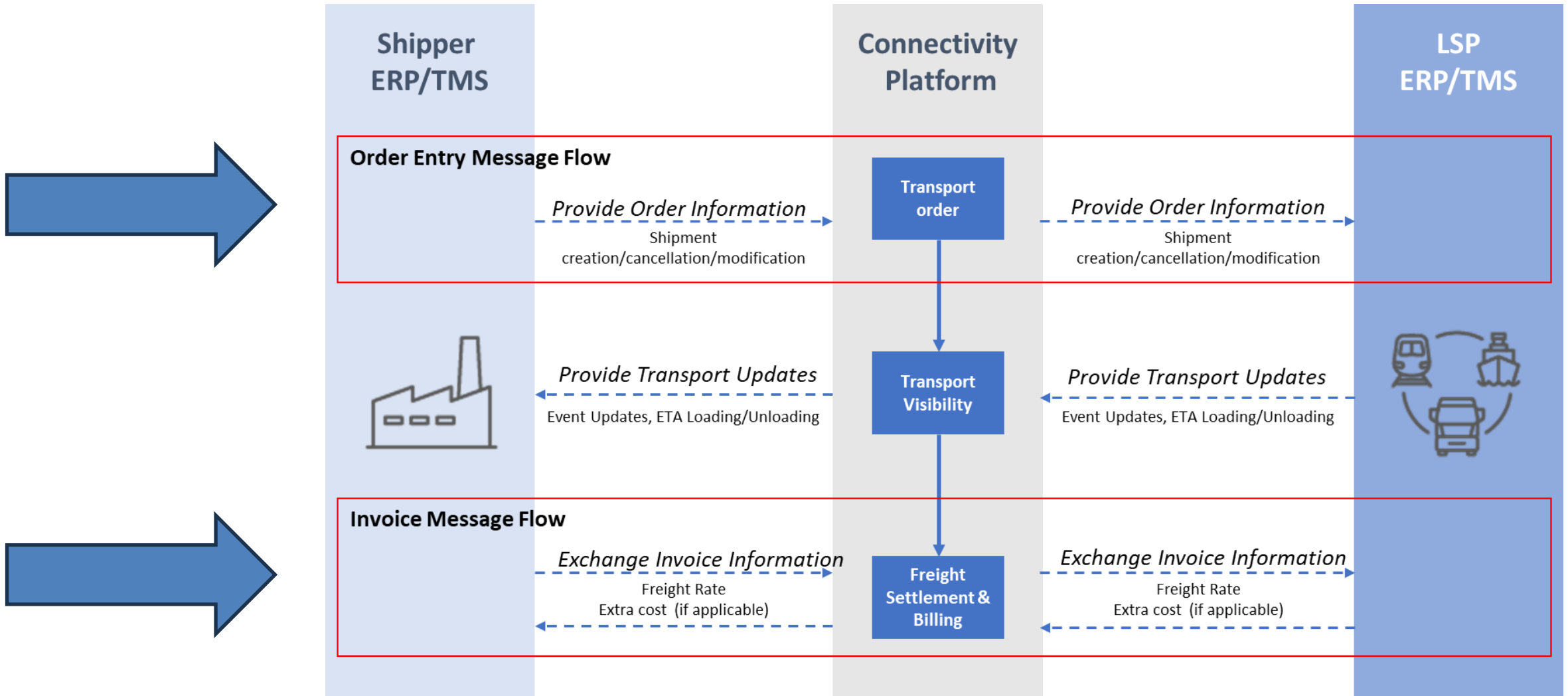
Milestones message and ETx update trigger rules

Term	Update Trigger
ETA Loading	<ul style="list-style-type: none">• >24 hours prior to planned loading: deviation > 24 hours vs. last reported• <24 hours prior to planned loading: deviation > 1 hour vs. last reported
ETA Unloading	<ul style="list-style-type: none">• >24 hours prior to planned unloading: deviation > 24 hours vs. last reported• <24 hours prior to planned unloading: deviation > 1 hour vs. last reported
<u>For all Milestone</u>	<ul style="list-style-type: none">• Milestone updates transmitted in near real-time < 1 hrs

Learnings & current status

- Incremental roll-out
- Platforms have already implemented technical solutions for the ECTA standard
- Proposed exchange formats were already applied
- Widely accepted among customers
- Benefits apply for all involved actors
- More transparency requires more focus on data accuracy → increased monitoring

Order & invoicing data



Work group partner

- Association

ECTA

- Logistic Service Providers



Transports
FOCKEDEY



HOYER
GROUP

TALKE
always a smart move



- Platform providers

Elemica

TRANSPOREON

Result & achievements order data

- The ECTA order message is largely derived from the existing **OAGIS® Chem eStandard 5.4**, but **extended with some ECTA-specific attributes**.
- Typical invoice **XSD** as well as **example XML messages** for the recommended data exchange formats via EDI are **available for download**.

Acknowledgement Message - CUSTOMER View			
Level	Content/Attribute	Value	Mandatory (M), Optional (O)
Routing	DocumentIdentifier	individual	M
	ThisDocumentDateTime	ISO Codes 8601	M
	From	DUNS Number / CompanyID	M
	To	DUNS Number / CompanyID	M
	RequestingDocumentIdentifier	Reference to Order Message	M
Header	LoadTenderNumber	Order Reference	M
	AcceptOrReject	Accept/Reject indicator	M
	RejectReason	Reject reason, if rejected	O
	CarrierReferenceNumber	Carrier system reference	M
	ecta:ReferenceInformation	3rd party order references	O
	SpecialInstructions	Free text (200 characters)	O
Shipper Party	PartnerName	Partner Name	M
	PartnerIdentifier	Partner Id (buyer assigned)	M
Carrier Party	PartnerName	Partner Name	M
	PartnerIdentifier	Partner Id (buyer assigned)	M

Table 2: Attributes of Transport Order Acknowledgement Message

- Transport order message
- Transport order acknowledgement message

Learnings & current status order data

- Publication of ECTA Transport order Guideline in December 2021
- Promotion of the ECTA Transport order Guideline in the sector
- Implementation done by several parties

Result & achievements invoicing data

- The ECTA invoice message is largely derived from the existing **OAGIS® Chem eStandard 5.4**, but **extended with some ECTA-specific attributes**.
- Typical invoice **XSD** as well as **example XML messages** for the recommended data exchange formats via EDI are **available for download**.



8. Annex

8.1 Invoice – freight bill

For further details please check the file (ecta_freight_bill) [here](#).

8.2 Invoice - freight bill audit response

For further details please check the file (ecta_freight_bill_response) [here](#).

8.3 Overview and Definition of Cost Types

ECTA CODE	Category	Cost Type	Definition
ADJBAF	Adjustment base freight	BAF	Bunker adjustment factor (BAF)
ADJENG	Adjustment base freight	Energy	Adjustment of base freight based on energy floater
ADJFUE	Adjustment base freight	Fuel	Adjustment of base freight based on diesel floater
ADJADR	Adjustment base freight	ADR	Dangerous goods surcharge for road transport
ADJRID	Adjustment base freight	RID	Dangerous goods surcharge for rail transport
ADJCAF	Adjustment base freight	CAF	Currency adjustment factor (CAF)
ADJWRS	Adjustment base freight	WRS	War risk surcharge (WRS)
ADJIMO	Adjustment base freight	IMO	Variable adjustment of base freight based on hazardous cargo class
ADMHAN	Administration	Manual handling fee	Administration fee
ADMADV	Administration	Advice	Advice fee
ADMCAN	Administration	Cancellation	Cancellation fee
ADMCOU	Administration	Courier	Costs for courier/postage

- Invoice – freight bill
- Invoice - freight bill audit response
- Overview and Definition of Cost Types

Learnings & current status invoicing data

- Publication of ECTA Invoicing Guideline in December 2022
- Promotion of the ECTA Invoicing Guideline in the sector
- Ready for initial implementation with customers or their platform providers

Open webinar discussion :

Questions from the webinar participants: review of questions in chat

Cedric Walti (Bertschi)

Johanna Klaußen (Hoyer)

Linda Krielaart (Van Den Bosch)

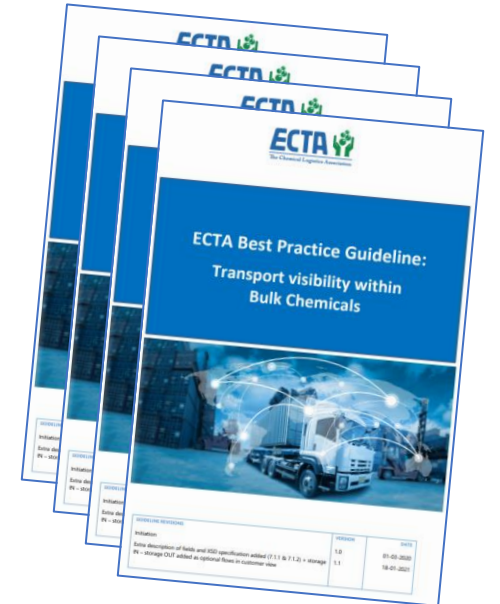
Peter Devos (ECTA) moderator

Thanks all for your participation in this webinar.

Feedback form will be sent after the webinar

May I also bring to your attention:

- All ECTA best practice guidelines can be consulted on www.ecta.com
- Next ECTA digitalization webinar:**
 - ✓ Equipment and truck and truck driver data standards





Thank you!