

The Global Language of Business

GS1 T&L MO Interest Group

Conference Call

Thierry GRUMIAUX T&L CoE Leader 21st January 2021





Anti Trust Caution



- Participants on GS1 Boards, committees, task forces, work groups, task groups, or other similar bodies, must always remember the purpose of the Board, committee, task force, or work group is to enhance the ability of all industry members to compete more efficiently and effectively to provide better value to the consumer or end user. Because GS1 activity almost always involves the cooperation of competitors, great care must be taken to assure compliance with anti-trust laws. This means:
 - Participation must be voluntary, and failure to participate shall not be used to penalize any company.
 - There shall be no discussion of prices, allocation of customers or products, boycotts, refusals to deal, or market share.
 - If any participant believes the group is drifting toward impermissible discussion, the topic shall be tabled until the opinion of counsel can be obtained.
- Meetings shall be governed by an agenda prepared in advance, and recorded by minutes prepared promptly after the meeting. Agendas, where appropriate, and minutes are to be reviewed by counsel before they are circulated.
- Tests or data collection shall be governed by protocols developed in consultation with and monitored by counsel.
- The recommendations coming out of a GS1 Board, committee, task force, work group or task group are just that. Individual companies remain free to make independent, competitive decisions.
- Any standards developed must be voluntary standards.

http://www.gs1.org/gs1-anti-trust-caution



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AGENDA



1- Housekeeping	
# Roll call and Agenda review	Thierry
# Anti-trust caution	Thierry
# Approval Minutes previous call	Thierry
# Xchange articles	Thierry
2- Updates on-going Work Requests	
# T&L CoE update	Thierry
# GS1 China / Coldchain initiative	Molly
# UNCEFACT RDM2API presentation	Sue Probert
# Maritime and Ports update – other initiatives	Thierry/Jaco
3- MO updates (ongoing/future projects)	All
	All
4- Next call CET	



Approval Minutes latest meeting

All





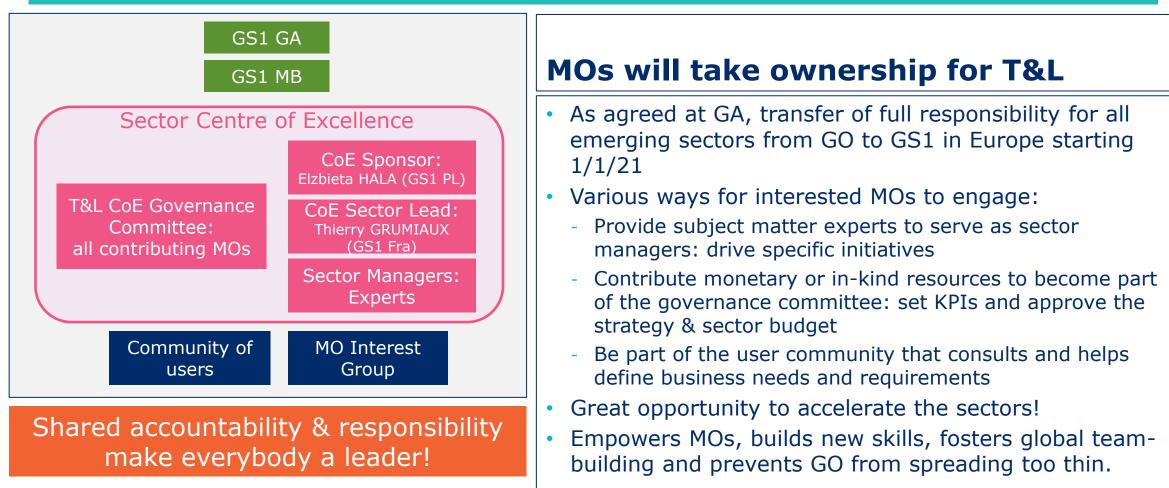
T&L CoE update

Thierry GRUMIAUX



Centre of Excellence Transport & Logistics











- The CoE is **THE** place where the **cohesion** between all MOs for T&L related topics must be achieved
- We will need to get clear **mandates** from our members
- For any Topics which will be handled or covered by the CoE, we will need to designate a leader together with a substitute.
- If no leader is found, the topic will be **postponed** or put on the side or will have to be **handled on a local basis** (if it comes from a specific MO)
- In this case, the CoE will request **regular updates** in order to be able to present it to the other MOs and find a leader.

We are not replacing GO, we are willing to work in a different way and we will share accountability and responsibilities for GS1 globally







THE GOVERNANCE COMMITTEE

- The T&L Governance Committee will be responsible for the governance and for setting the KPIs and OGSMs for the global T&L activity
- This includes approving the Strategy and annual budget (in alignment with the 3 years Strategy) proposed by the T&L Team and supported by the Sponsor.
- The T&L governance committee membership is updated annually in accordance with contributing MOs joining or leaving.
- Each MO that actively contributes and participates by appointing the sector managers will automatically have a seat on the T&L Governance Committee.







The T&L Sector Managers

- They are T&L experts in their own country.
- They will work on the global T&L activity.
- T&L Managers are enabled and empowered to deliver on the set objectives.
- The T&L Leader together with the T&L Managers form the T&L Team.

the main task force for the T&L CoE !

They will be responsible for answering questions within their region (South and central America, Europe, Asia – Pacific)





The User Community the mirror of the T&L stakeholders.



Consults and helps define business needs and requirements for the activity

- GS1 Austria
- GS1 Australia
- GS1 Belgium/Luxemburg
- GS1 Brazil
- GS1 Colombia
- GS1 Czech Republic
- GS1 China
- GS1 France
- GS1 Germany
- GS1 Hong Kong
- GS1 Hungary
- GS1 Japan
- GS1 Lybia
- GS1 Netherlands



- GS1 Poland
- GS1 Slovenia
- GS1 Spain
- GS1 Switzerland
- GS1 Taipei
- GS1 Turkey



Transport & Logistics: Major Goals (in OGSM format)



	Last Mile	Maritime & Ports M&P Leader : Zomar and Yohany (Backup Thierry for EU)	Road/Multi-modal transport Leader : Michiel and Sandra	Paperless Transport Leader : Thierry and Agata (Yohany)
FY 20/21	 Sharing experience with other Mos (T&L MOIG) Develop a plan with new/additional leaders 	 Create Leadership Group M&P with Ports and MOs Find a port ready to start pilot/POC on GLN Registry (Rotterdam, Marseille, Rosslare) Promote the work on the Global Location Data Platform - GLDP (Port of Rotterdam) collaborations involving DCSA, ITPCO etc. to create a Mission Specific Work Group (MSWG) for the development of an "Implementation Guideline for Integrated Track & Trace for Multi Model Transportation from Seller to Buyer using EPCIS". (If MO wants to take lead) 	 Drive adoption Harmonized Transport/logistic Label (incl. S4T 2D barcode) First business case on S4T implementation 	 Develop paperless (Application guideline) standards for interoperability, including eCMR where applicable. Ensure DTLF Federative Infrastructure work adopts Global Data Standards (incl. GS1) Support further development FIATA Collaboration Platform Develop a review of paperless projects by MOs



Transport & Logistics: Major Goals (in OGSM format)



	Customs (EU VAT legislation, ICSII, GTIN/GLN identification) Leader : Thierry (See Patrik JONASSON for NZ project)	Standardized API Leader : France and Poland (Yohany) TBC
FY 20/21	 GS1 Keys supported in Electronic Advance Data for eCommerce imports into EU EU/Member State Implementation Guidance to mention GS1/ISO (cooperation with the Trade Contact Group) Support GS1 China/US initiative with Customs (developments with DGTAXUD) Support implementation of GS1 Keys within the Customs electronic system for crossborder trade (i.e BREXIT) 	 Create Leadership Group (if enough industry interest) Support deployment Slot Booking management platform/API (France project to be shared) Identification of priorities for other standardized APIs with other Mos and the Industry Promote the work on the Global Location Data Platform GLDP (with Port of Rotterdam/port of Marseille) collaborations involving DCSA, ITPCO etc. to create a Mission Specific Work Group (MSWG) for the development of an "Implementation Guideline for Integrated Track & Trace for Multi Model Transportation from Seller to Buyer using EPCIS.



Topics



External Organisation	Thierry / CoE T&L	Jaco	Remarks
CEN	Leading	Supporting	Support On request, for work prior to 2021
UPU Consultative Committee	Supporting	Leading	Work Load - A day or two per annum
DG-TAXUD / Customs	Leading	Supporting	Support On Request
ITPCO co-chair	Supporting	Leading	Support On Request
Global Location Data Platform	Leading	Supporting	Support Product/Solution focussed
FENIX	Supporting	Supporting	Led by GS1 Germany; Product/Pilot focussed
PLANET	Supporting	Leading	JV Advisory Board Member (not transferable)
FIATA	Leading	Supporting	JV Support product/solution focussed
UN/CEFACT Smart Container	Supporting	Leading	A few days per annum
			(potential opportunity GLN service)
UN/CEFACT Track & Trace	Supporting / Leading	Leading / Supporting	JV Leading White Paper; TG leading BRS development
UN/CEFACT eCMR	Leading	Not involved	
UN/CEFACT RDM2API	Leading	Not involved	Related to OGSM Standardised API objective
UN/CEFACT other projects			Alignment with / through Piergiorgio L required
IRU – eTIR	Leading	Not involved	
ALICE-ETP	Leading	Supporting	A day or two per annum
DTLF	Leading	Supporting	JV: focus on future architecture for Information Sharing and Services
			(e.g. Registries and Repositories)
DCSA	Leading	Supporting	JV Member of Industry Reference Group.
BITA	Leading	Supporting	BiTA efforts in support of GS1 US leadership.
Scan4Transport prototyping	Supporting	Supporting	GS1 Australia leading. Support on request.
GS1 Events	Leading	Supporting	JV Product / Solution focussed.
openPEPPOL	Leading	Supporting	JV Involved in Nordics T&L for PEPPOL group.
			Piergiorgio L official liaison.
			TG to be introduced to openPEPPOL organisation and Nordics Group.



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Other identified Topics with MOs



- DC Automation (GS1 NL)
- Ez track (APMEN project)
- Parcel Management standards (GS1 India)
- Multimodal freight data exchange (Imove) with GS1 Australia
- MSWG for PLANET/DCSA/GS1 related to container
- GS1 XML transport instruction and responses implementation guideline update (3M) (GSMP issue and EDI Group) Has to be handle by the MO where the 3M is located
- ALICE (Alliance for Logistic Innovation through Collaboration in Europe)
- CEN working groups (TC331 for example)
- Physical Internet applicable to Transport....

If any of the above topics are of your interest, feel free to contact us for



GS1 China / COLD CHAIN INITIATIVE

Molly/Patrik





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Proposal on Traceability of Cold Chain Food Exported to China

GS1 China 21 Jan. 2021









Background

Objective

Proposal & Approach

Action Plan



Background



To better control the management of imported cold fresh food traceability, <u>Chinese State</u> <u>Administration for Market Regulation (SAMR)</u> has launched a "Traceability Management Platform" to realize the traceability of the complete processing/transportation chain of key cold chain food (seafood, meat and poultry) covering:

- ✓ Customs clearance
- ✓ Inspection and quarantine
- ✓ Processing
- ✓ Wholesale & retail
- ✓ Sale in supermarket

to precisely position each batch of food.

SAMR's Notice

一、总体要求。

以习近平新时代中国特色社会主义思想为指导,坚持"疫情防控慎终如始"和"四个最严",督促企业切实履行食品安全追溯和疫情防控主体责任,建立健全冷链食品追溯管理平台和标准规范,加快企业信息化追溯体系与政府部门监管平台对接,实现 重点冷链食品从海关入关、生产加工、批发零售、餐饮服务到消费者的全链条实时信息化追溯,切实保障市场供应,提升消费者

<mark>信心,精准定位问题产品。</mark>。



Background



Cold chain food importing and operation companies are required to:

- Assign electronic traceability code to related products by batch
- Report traceability data:
 - Product name
 - Specifications (net weight, net content etc.)
 - Batches (in-flow & out-flow)
 - Origin
 - Inspection & quarantine
- If there is a traceability code that complies with GS1 code and traceability standards on the product packaging, no additional code is required.





What's for GS1



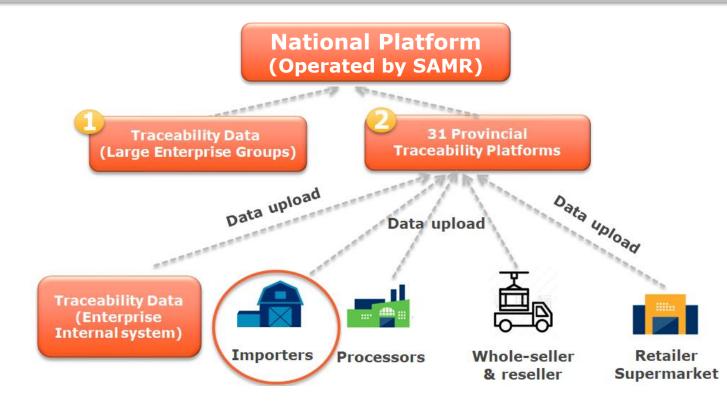
- GS1 has opportunity to position our standards to be used in cold chain food traceability system, encourage companies to utilize GS1 barcode with easy track and trace.
- Source data published by overseas brand owners can be revealed to the relevant parties including Market regulators and Chinese consumers, hence increase their confidence in imported cold chain food.
- Improve the transparency of the supply chain to ultimately benefit consumers as well as protect the brand and interest of overseas cold chain food suppliers.



SAMR Traceability Platform



Phase I: Data exchange btw SAMR & provincial platforms



Data upload includes:

- 1. Traceability code (i.e. GTIN-128)
- 2. Product name
- 3. Inspection & quarantine certificate No.
- 4. Country of Origin
- 5. Total net weight
- 6. Port of landing & date
- 7. Purchasing date; inbound date; outbound date
- 8. ...



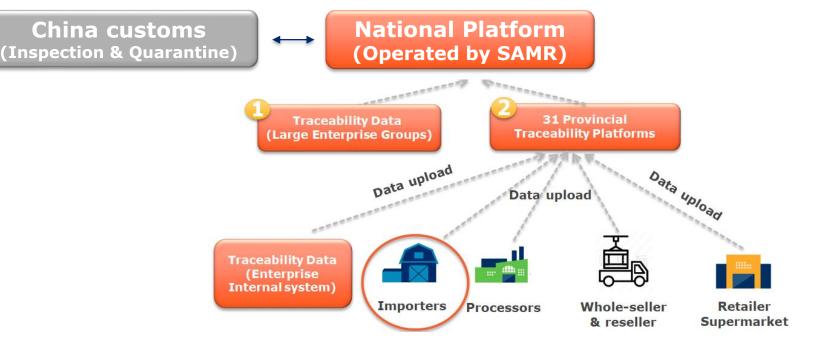
SAMR Traceability Platform



Phase II: Data exchange btw SAMR & China customs

Data exchanged include:

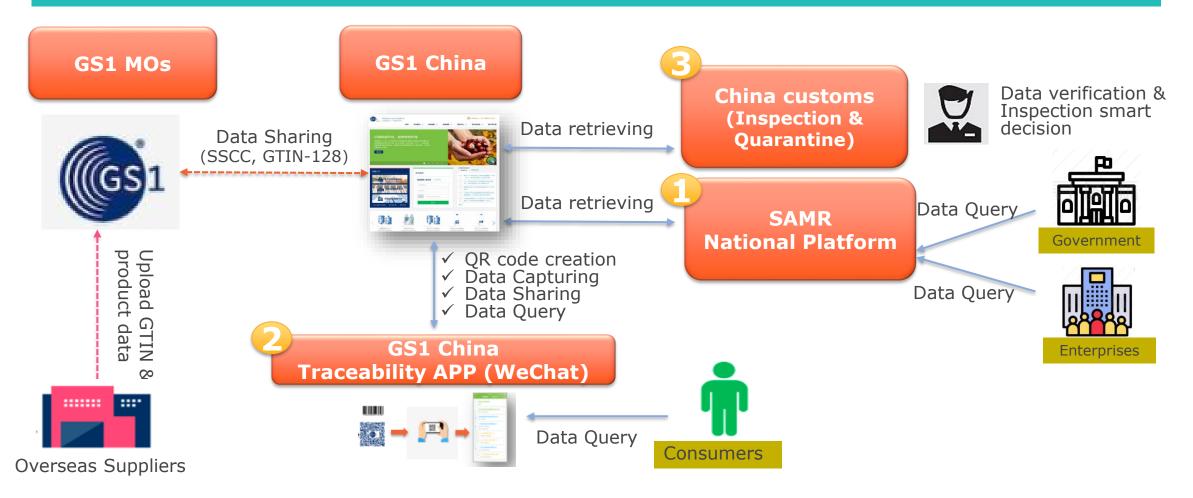
- 1. Batch code (i.e. GTIN-128)
- 2. Inspection & quarantine certificate No.
- 3. Product name
- 4. Country of Origin
- 5. Total net weight
- 6. Port of landing & date
- 7. Shipper/Consignee





Proposal







GS1 China Traceability APP





Product Information	
く 条码追溯	••• ••
产品信息	货运信息 更多信息
英文品名	BOVINE
制作或保存方法 (鲜、冷、冻)	KEEP CHILLED -1 DEGREE CELCIUS
牛肉部位	*YP* N.E. BRISKET (Z-SPEC) IW/VAC GF (CHINA)
包装规格	
品牌	Teys Aust - Wagga
べ号(名称或号码)	0291
牛种(安格斯、 和牛等)	Australian Angus Beef
级别(A级、B级 等)	MSA 4@15days Grill
饲养方式(草 饲、谷饲等)	Grass Fed
原产国	AUSTRALIA
牛龄	

Shipment Information			
く 条码追溯	••• 💿		
产品信息	货运信息 更多信息		
入境港	PORT OF SHANGHAI		
出货港	PORT OF BRISBANE		
启运国	AUSTRALIA		
运抵国	PEOPLES REPUBLIC OF CHINA		
启运日期	20200706		
商品总件数	794		
≪批货物总净重	11975KG		
提单号			
集装箱号	TTNU8653442		
标记唛码	248464A		
航运公司	COSCO CONTAINER LINES CO. LTD		
境内收货人名称	SHANGHAI PARADISE GARDEN HEALTHY FOOD CO LTD ROOM 811, YINQIAO BUILDING NO. 58 JINXIN ROAD, PUDONG SHANGHAI, P.C.		



Action Plan



Based on the company list (14,819) published on China Customs website, please help to check if those are MO's member; and the number of those who are using GS1 code.

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For those who are MOs' member with product data on local product catalogue, please share the GTIN & product data.

If not, please help to encourage your local brand owners or suppliers to apply to GS1 standards & report data on MOs' local platform.

3

Product Data:

- 1. GTIN-128 code
- 2. Product name
- 3. Country of Origin
- 4. Total net weight

5. Port of landing

6. Inspection & Quarantine Certificate No.



Benefits



Benefits to MOs

For companies not GS1 member, potential opportunity of having them to join (It shows 2900+ EU companies approved by China Customs to export cold chain food to China) Benefits to overseas suppliers

- > Increase product credibility and popularity in China market
- > Enhance consumers' confidence on product and brand
- > Anti-counterfeit & ensure the source of the cold chain food is credible







RDM2 API – UN/CEFACT

Sue Probert Chair of UN/CEFACT and Chair of the UNLOCODE Advisory Board. Lead Editor of the UN/CEFACT Core Component Library and the UN/CEFACT MultiModal Transport reference Data Model





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UN/CEFACT API Project Semantic Standards for Business Process Interoperability Past, Present and Future

Sue Probert

Chair, UN/CEFACT, suesiprobert@live.com





Objectives

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- Simple, transparent and effective processes for global business
- Efficient and automated exchange of information

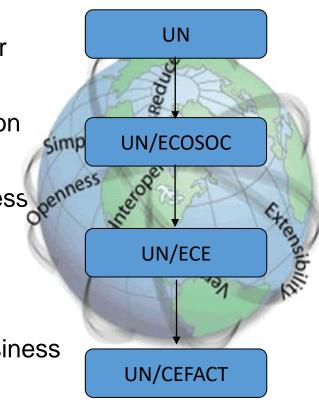
Outputs

Global Trade Facilitation and Electronic Business
 Recommendations and Standards

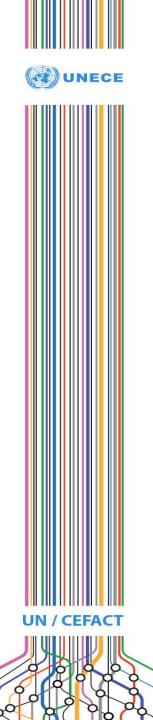
Means

- Public Private Sector Partnership

 over 1000 experts from government and business
- Experts meet via internet every week plus two Face-to-Face Forums per year







UN/CEFACT Key Outputs

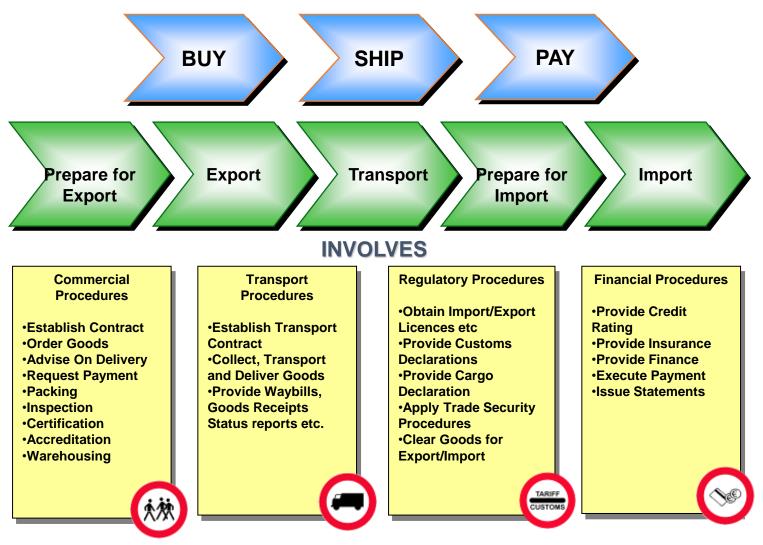
- Business Standards
 - Process Models
 - Reference Data Models (RDMs)
 - Semantic Libraries (UNTDED, Core Component Library (CCL) and UN/EDIFACT Directories)
 - Future: APIs
 - UN/LOCODE
- Trade Facilitation Recommendations
- Technical Specifications



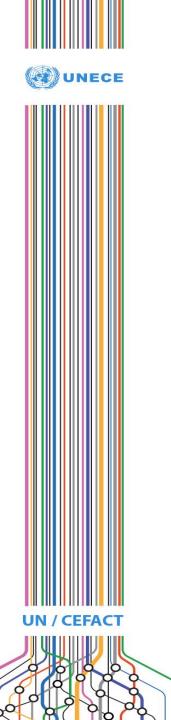
UN / CEFACT

UNECE

UN/CEFACT International Supply Chain Process Model



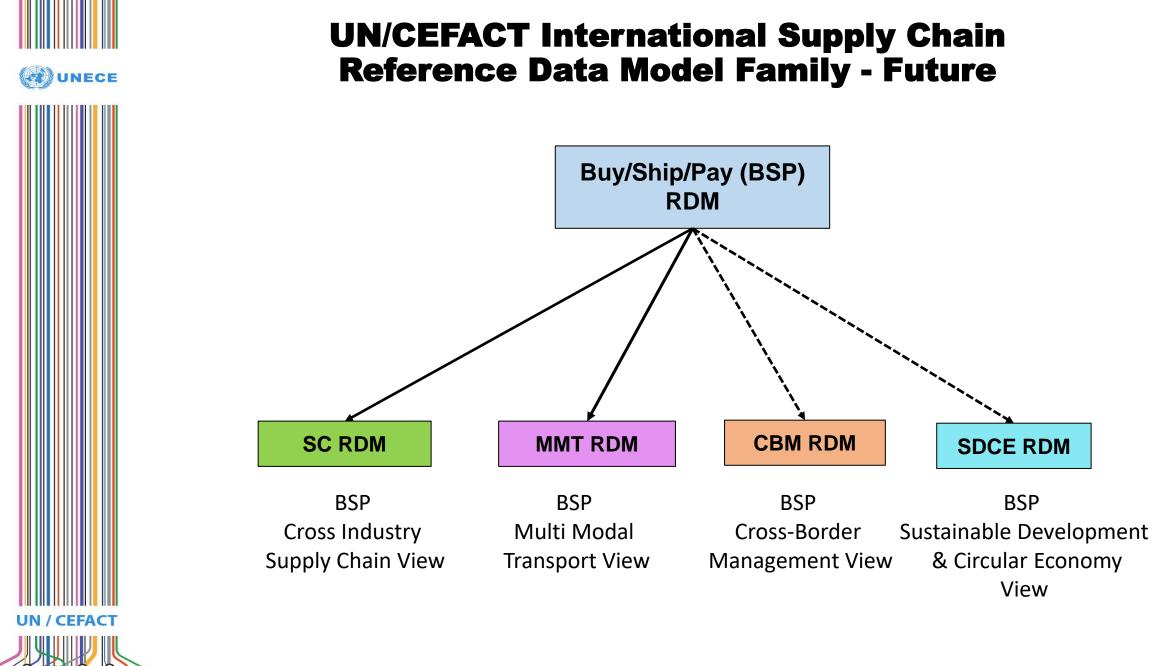
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UN/CEFACT evolution/revolution – Reference Data Models

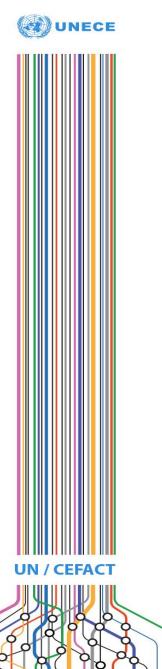
Benefits of UN/CEFACT Semantic Models

- Contextualised Profiles of CCL Library
- The support for information sharing, such as enabled by data pipelines, with the timely capture of quality data from original data sources ensuring supply chain visibility
- Reduction of administrative burden by efficient reuse of data shared within the BUY SHIP PAY domain model
- Standardized data exchange structures, based on common Master data exchange structure and independent of exchange syntax
- Common basis for implementing in chosen data exchange syntax(es)



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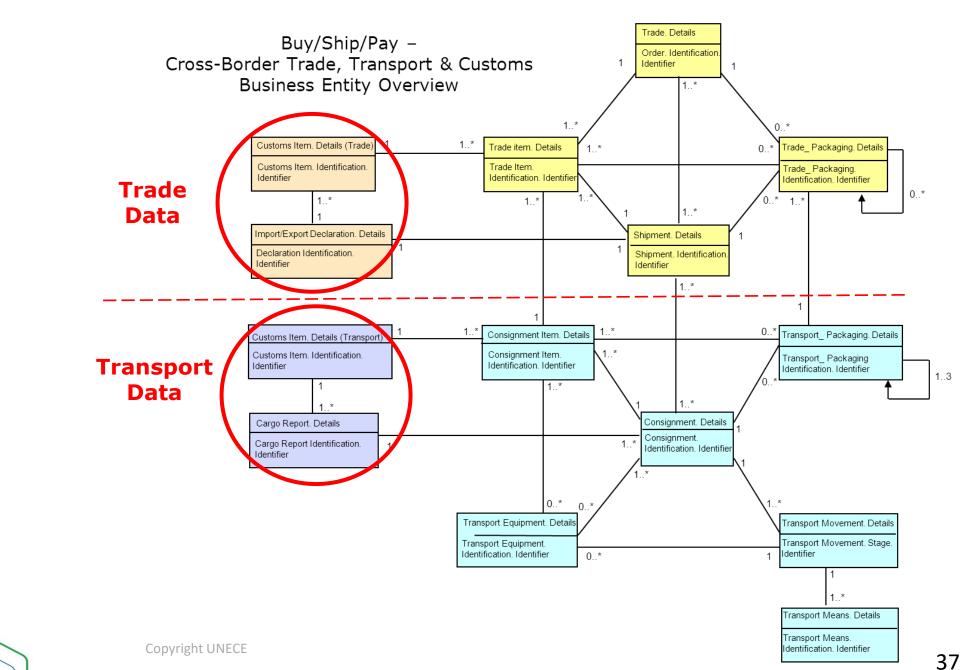




Basis for Semantic Interoperability

Agreed and Harmonised

- Party and Role Definitions
- Semantic Anchors
- Message Structures
- Contextualised Code Subsets
- Contextualised Business Rules



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CEFAC

Related Projects

Recently Completed Projects

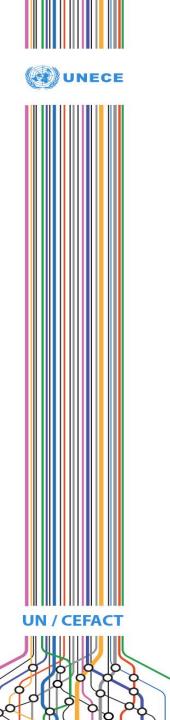
- Buy Ship Pay Reference Data Model
- Smart Container eBusiness standard
- White Paper overview of Blockchain in Trade
- Header Envelope Project (with OASIS)

Ongoing Projects

- RDM2API
- Cross Industry Supply Chain Track and Trace
- Blockchain Cross border Inter-ledger exchange for Preferential Certificates of Origin
- Cross-Border Management RDM
- UNDA COVID-19 initiative Digitised Transport Data Exchange Structures based on MMT

New/Future Projects

- Open Finance Whitepaper
- Accounting and Audit Reference Data Model
- SDCE Sustainability Development Circular Economy RDM



Areas of Interest

- Digital Twins
- Artificial Intelligence & Autonomous Devices
- Sustainable Development & Circular Economy
- Web3 / Decentralized Internet of Value
- Central Bank Digital Currencies (& so-called stablecoins)
- Blockchain & Digital Ledger Technologies





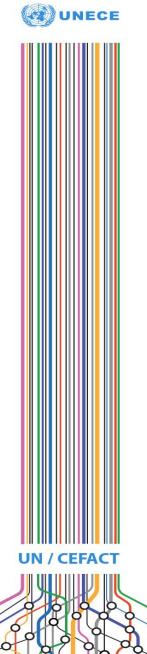
RDM2API and API Townplan Projects

Project Leader Steve Capell

steve.capell@gmail.com

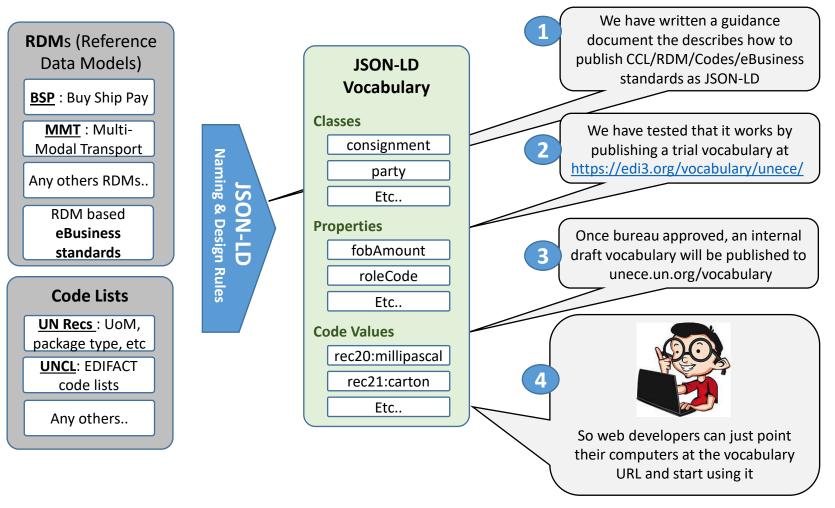






The first step is vocabulary publishing

The first thing we need is a complete and consistent **machine-readable** publishing format.

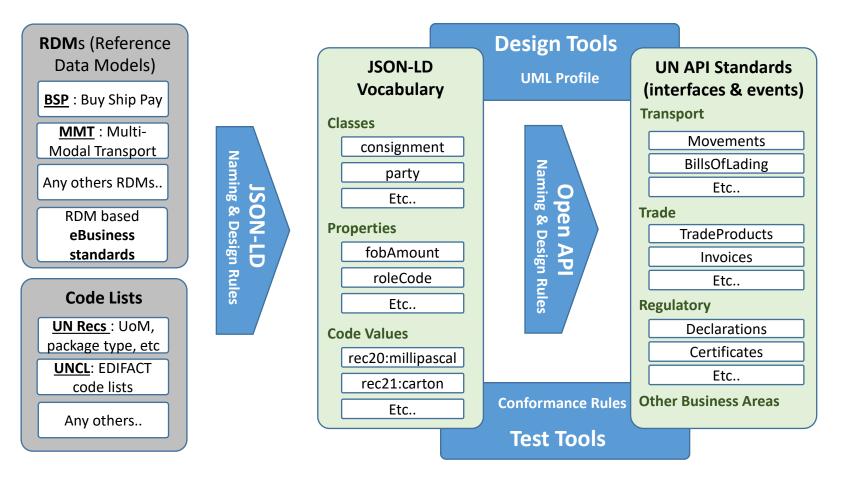






Then we'll publish API standards

We have drafted Open API design rules and documented a UML profile so that API designers can use simple tooling to make high quality API designs.

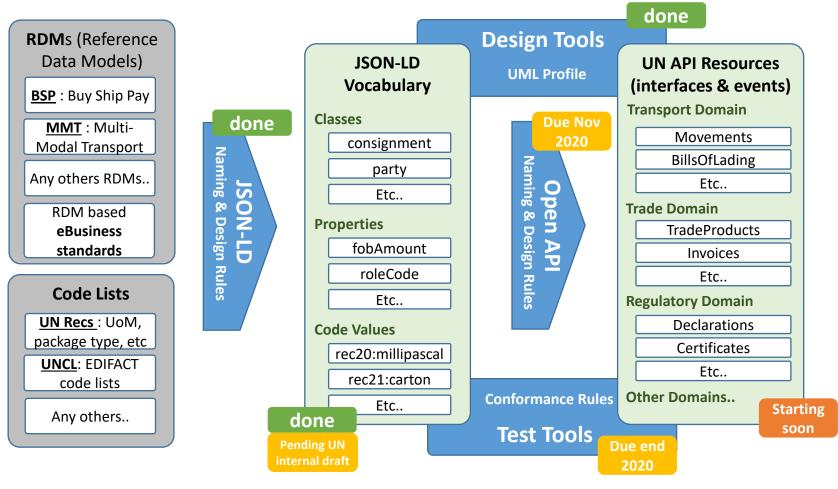


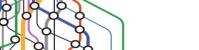




Following this timeline

We are nearly done! We will have the complete framework completed and tested before year end.



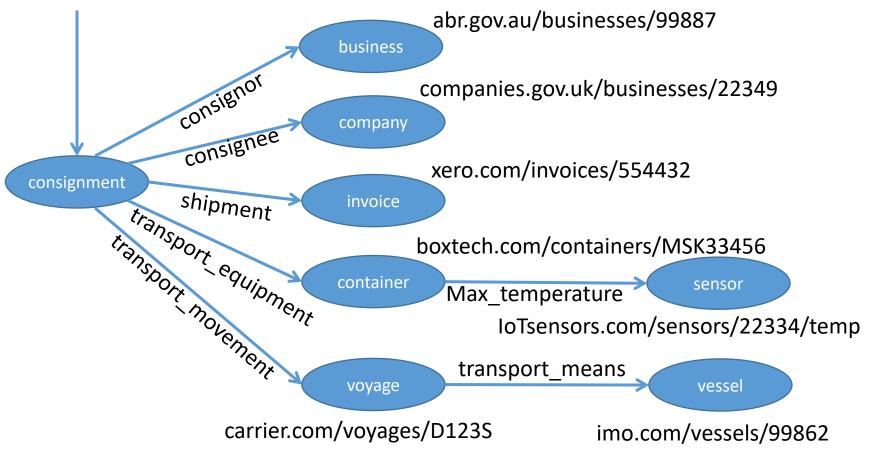




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APIs are about linked data discovery

Here's a consignment resource and its relationships https://api.3plcompany.com/consignments/12345



Its really a set of links to sources of truth. A paradigm shift from document exchange to linked data discovery. This is a different business model, not just a different technology

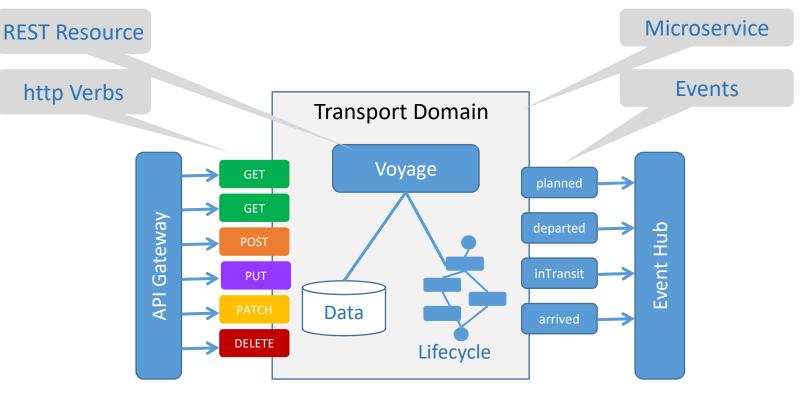


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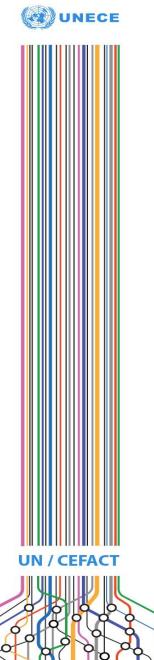


REST = "Representational State Transfer". A mouthful – but it just means a bestpractice style for building high quality web APIs



POST https://api.transport.border.gov.au/v1/voyages/{new voyage_data} PATCH https://api.transport.border.gov.au/v1/voyages/V1234S/{updated voyage_data} GET https://api.transport.border.gov.au/v1/voyages?Port=AUBNE





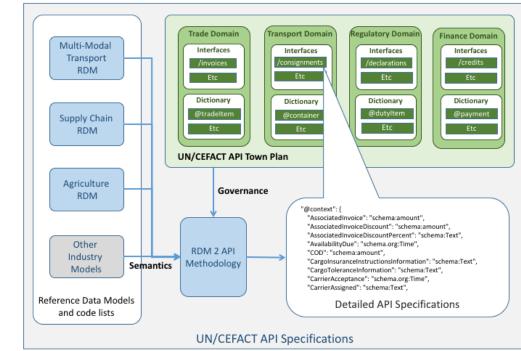
We also need governance – the town plan

An API serves a specific function – like voyage scheduling or container tracking. There are hundreds of functions across the international supply chain and, for each function, dozens of alternative ways to implement it. So there is potential for a chaotic confusion of API "standards".

In the same way that good city planning makes for a liveable city - so our API town plan project is a governance framework to ensure that we deliver a well organised suite of API standards.

The town plan aims to define:

- A map of business areas and API resources (ie the plan).
- Governance rules for changing the plan (eg a new area or resource)
- API version control (eg major.minor) and lifecycle rules (eg draft, stable, deprecated)
- Publishing model for JSON-LD vocabulary and API specifications.
- Implementation conformance criteria (i.e. how you can claim compliance)
- Community feedback mechanisms (i.e. how you contribute your needs and tell us what to fix).
- Relationship to other standards (GS1, WCO, schema.org, etc)

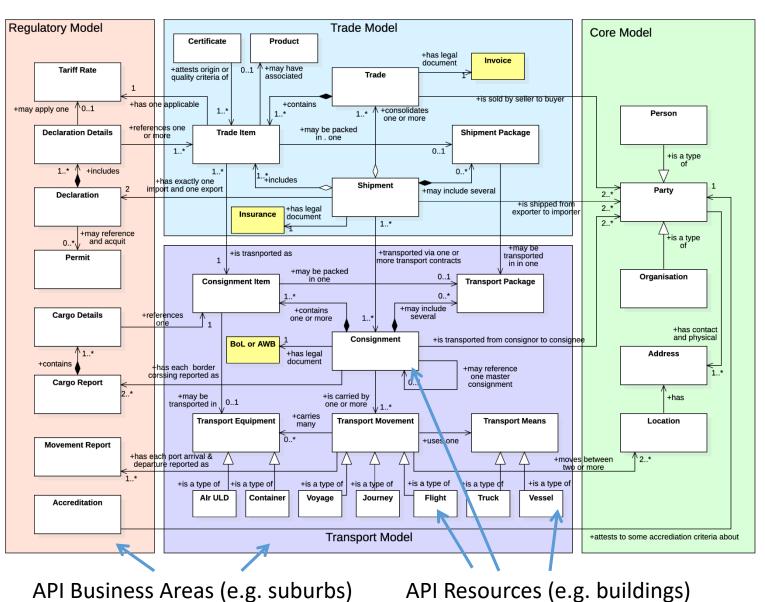




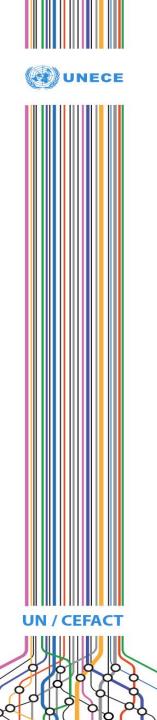


UN / CEFACT

That looks something like this



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Thanks for listening

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Steve Capell

Project Lead, UN/CEFACT RDM2API, <u>steve.capell@gmail.com</u> slack chat at : <u>https://edi3.org/community/</u>

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www.unece.org/cefact/ and tfig.unece.org

All experts are welcome to join the standards development work free of charge

UN/CEFACT Secretariat

Lance THOMPSON lance.thompson@unece.org









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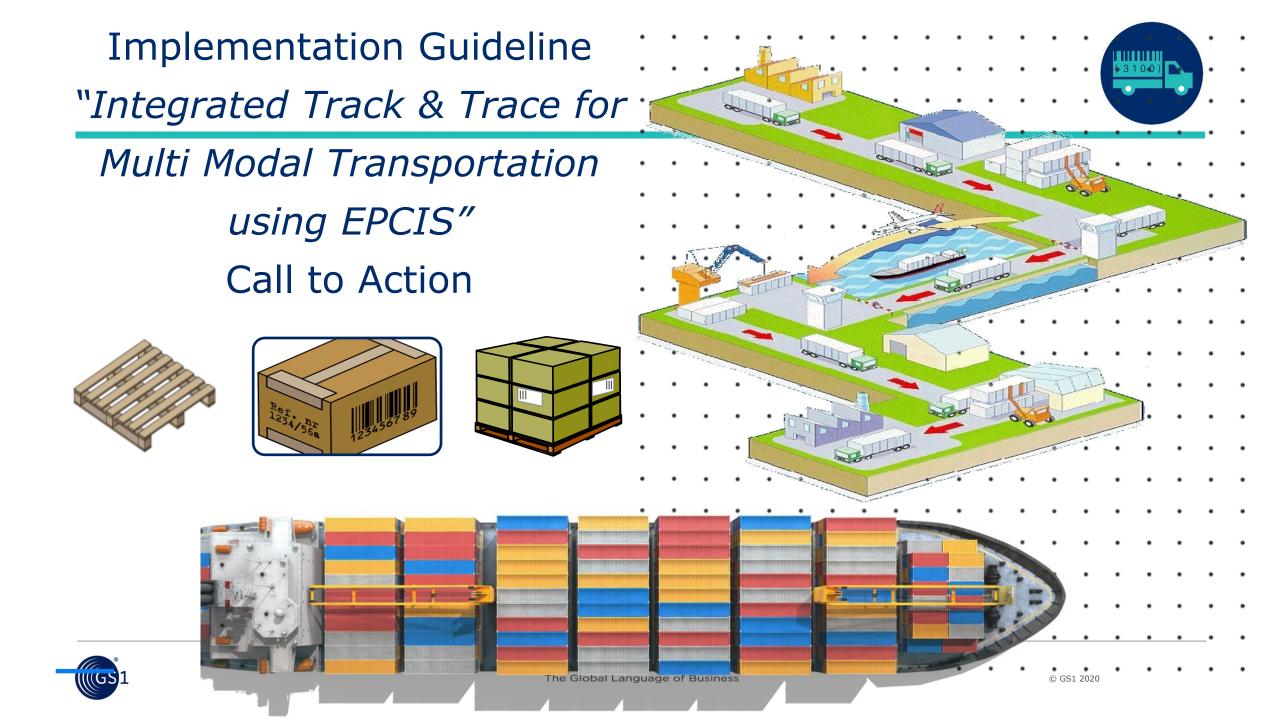


Implementation Guideline "Integrated Track and Trace for Multi-modal transportation using EPCIS"

Jaco









Where is the product at any time? And in which condition?

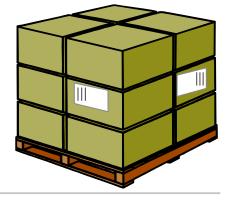
- → Any kind of traded goods
- → Regardless of how it is packaged (containerised transportation) or not packaged at all (bulk transportation)
- → The history of the asset is part of the project (even empty)
- The end-user's expectations are getting higher: requiring better quality, more visibility, better services and more control of their supply chain.











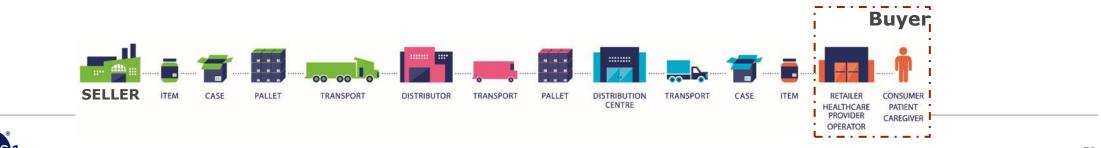


Mission Statement



- The mission of this project is to enable tracing, tracking and monitoring of products (or assets) and to enable information sharing in standard electronic format.
- Scenarios will be defined to explain the data that will be generated and captured concerning products or other traded items (e.g. lots).
- To trace, track and monitor any traded items we may have to trace transport equipment/assets (e.g. pallet, container) also.
- The focus is on logistics services (enhancing visibility, preserving quality) to transport the traded goods between the **seller** and the **buyer**.

The output will be the Implementation Guideline to support the exchange of track & trace information consistently across all stakeholders.







 \rightarrow No Regulatory Compliance within the country and/or at border control

As well as:

- → Not Farm-to-Fork or Catch-to-Kitchen
- \rightarrow No manufacturing process events that precede the sale of goods.



Tentative Project Plan

- January 2021; Submit Work Request to GSMP
- Q1 2021; Seat the MSWG
- March June; Gather business requirements
- June September; Develop Implementation Guideline
- Q4 2021; Ratify and publish Implementation Guideline
- Call to Action and Work Request proposal available on the T&L MO IG Community Room
- We need you to indicate your interest <u>https://www.doodle.com/poll/wrzszd4w6ebnpdcs?utm_source=poll&utm_medium=link</u> Or mail Thierry or me.
- Please also reach out to User Companies who might be interested.

Many Thanks in advance



Global Standards Management Process Integrated Multi-Modal Track&Trace Mission-specific work group Call to action

Sharing event data using ISO EPCIS standards

Supply Chain stakeholders including the Sellers and Buyers of Goods have started to realise they need (real-time) and reliable answers to basic questions like "Where are my Goods?" and "Are my Goods still in good condition?" to manage their supply chain operations properly.

Consider that many retailers and shippers must use dozens upon dozens of transport and logistics providers in all modes of transport and must use just as many different ways to exchange the same track & trace information with them. Even logistic service providers (LSP) collaborate with large numbers of other LSP and face similar challenges. For retailers and shippers as well as LSP, there is excessive waste associated with the development costs and time required to setup many different partners in their transport systems and processes. Most importantly, the lack of interoperability prevents stakeholders. from actually sharing the track & track information, captured by other stakeholders.

Problem statement

Few, if any, of the stakeholders can obtain a complete overview of the actual end-to-end supply chain related to the goods shipments moved as consignments.

Using a common Implementation Guideline that unambiguously describes the track & trace information to be exchanged in detail (semantics) and that provides a common syntax (EPCIS), stakeholders can much more easily process track & trace information provided by other stakeholders. This translates into much faster date-driven decision making with near-perfect accuracy, especially in the "last mile" where the number of transport movements is rapidly increasing and more and more stakeholders are involved in the transportation from seller to buyer (consumer or business).

The primary focus for the Implementation Guideline to be developed is on tracking and tracing during transportation covering the movement of trade deliveries (shipments) from seller to buyer via one or more transport contracts (consignments) and one or more transport modes. It will cover all types of goods, be they in discrete transport units or transported in bulk directly in transport means or transport equipment⁴.

Background

Transportation demand is forecasted to triple by 2050³. Keeping track of that tsunami of transportation is imperative for all supply chain stakeholders. Universal Track & Trace capabilities will enable digital ecosystems to flourish overcoming current logistics inefficiencies. Companies will have full visibility and control of their supply chains as part of fully interconnected logistics networks so assets and resources are used to the max. Unfortunately, today transport & logistics do not offer these universal track & trace capabilities.



The GSMP is a community-based forum for businesses facing similar problems to work together and develop standards-based solutions to address them. Active GSMP participants represent industries ranging from retail and consumer goods to fresh foods, healthcare, transport and logistics, government and more—a healthy mix of business and technical people

from nearly 60 countries.



Current Key priorities efforts

ALL







