



The Global Language of Business

GS1 Transport & Logistics Workshop

Last Mile: The time to act is NOW

Jaco Voorspuij, Senior Manager Transport & Logistics
10th September 2018

Welcome & Agenda



- Schedule for this workshop
- Housekeeping
- Presentations and discussions
- Break
- Focussed Work Group sessions
 - City Logistics: Key to excellent Customer Experience
 - Emerging Parcel Standards: GS1 initiatives
- Work Groups reporting back to plenary
- Closing
- Lunch

Schedule for this workshop



10	Housekeeping	Jaco Voorspuij (Global Office)
20	Setting the scene	Jaco Voorspuij (Global Office)
20	Parcel and Postal standards: Initiatives, developments, news	Walter Trezek (Document Exchange Network)
20	City Logistics - Promising frontier for Transformation of Last Mile	ALICE-etp
15	Q&A and Discussions for all speakers	
30	BREAK	
Parallel focussed work groups		
City Logistics: Key to excellent Customer Experience Enabled by GS1 standards		No
5	Short intro	Jaco Voorspuij (Global Office)
40	Smart City Hubs thrive on GS1 standards	Birgit Hendriks (Eco2City)
45	Discussions in small groups	facilitated by Jaco & Birgit
Emerging Parcel Standards: GS1 initiatives		
5	Short intro	Garry Thaniel (Global Office)
20	GS1 Poland	Agata Horzela (GS1 Poland)
20	GS1 Portugal / GS1 Brasil - UPU	Roberto Matsubayashi (GS1 Brasil)
45	Discussions in small groups	facilitated by GS1 MO presenters
30	Focussed WG report back to plenary; Q&A	15 minutes each (5 + 10 Q&A)
10	Wrap-up and Close	Jaco Voorspuij (Global Office)



Housekeeping



WiFi Internet access



- Select network “**GS1events**” and connect
- Password: **GS1events**

GS1 Industry & Standards Event App



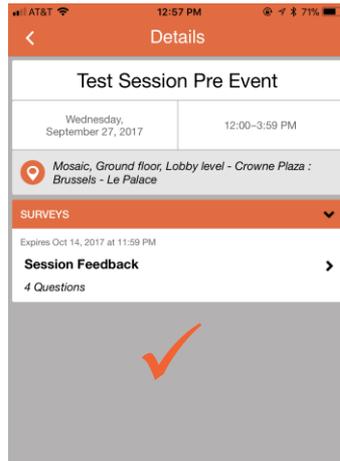
- 1** Get the App by searching your App store for "GS1 Global Events"
If you already have the Global App due to attendance at the most recent Global Forum, you do not need to do this
- 2** Once you have the Global App on your mobile device, type **GS1IS18** into the search box. Please click the **orange (+)** to activate the event within your application.
- 3** Login with the email address you used to register for the event:
Username: (your registered email)
Password: **GS1events**



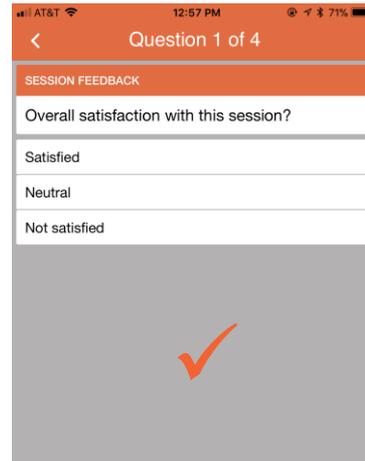
Event App – How to rate sessions



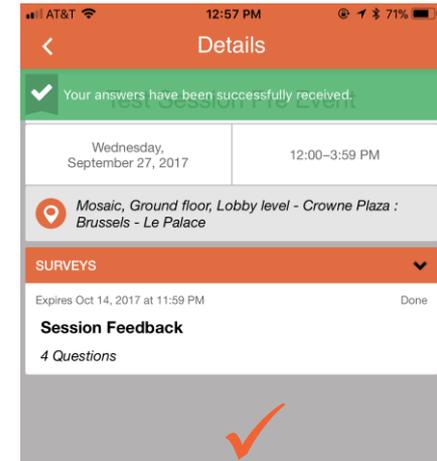
- 1 Within each session, you will see “surveys” listed at the bottom



- 2 Select your rating and enter comments



- 3 A confirmation appears



Meeting etiquette



- **Meetings will begin promptly as scheduled**
- **Be present – avoid multi-tasking**
- **Avoid distracting behaviour:**
 - Place mobile devices on silent mode
 - Avoid sidebar conversations
- **Be considerate**
 - Avoid monologues
 - Keep comments concise
- **Respect work group decisions**
 - Avoid re-opening decisions unless there is a significant quality impact
- **Collaborate** in support of meeting objectives
 - Ask questions
 - Be open to alternatives
- Be **representative**
 - Avoid personal remarks
 - Do not speak for your company or community if you do not clearly understand their needs
 - Votes should reflect the needs of your company or community

Anti-Trust Caution



- GS1 operates under the GS1 anti-trust caution. Strict compliance with anti-trust laws is and always has been the policy of GS1.
- The best way to avoid problems is to remember that the purpose of the group is to enhance the ability of all industry members to compete more efficiently.
- This means:
 - **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.
- The full anti-trust caution is available via the link below, if you would like to read it in its entirety: <http://www.gs1.org/gs1-anti-trust-caution>.





Setting the scene

Jaco Voorspuij, Senior Manager Transport & Logistics

10th September 2018; GS1 Industry & Standards Event 2018; Dublin



T&L - A simple definition



Transport and Logistics are the processes that take care of moving **goods** from where they are to where they should be.

B2C



B2B



Supply Chains are NOT simple



Source: Aberdeen Group
Supply Chain Visibility: A Critical Strategy to Optimize Cost and Service

Supporting ALL sectors



T&L is an **integral** part of every Sector's **Value Chain**.

T&L **follows the business** needs in every Value Chain.

Changing T&L landscape



1. **Convergence of physical and digital**
2. **E-commerce and consumers**
3. **B2B commerce**
4. **Globalisation**
5. **Urbanisation**
6. **Technology and innovation**

By 2019, B2B firms will spend more on e-commerce technology than online retailers do.

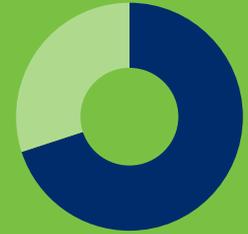
Source: [10 Ecommerce Trends for 2018](#)

E-commerce is likely to reach more than 20% of all retail sales.



Source: 2016 CGF Collaborative Logistics Report

70% of the world's population will move to an urban area by 2050.



Source: 2016 CGF Collaborative Logistics Report

Inefficient cross-border delivery is consistently one of the top-three biggest barriers for online merchants.

Top
3

Source: [Cross-border E-commerce Barometer 2016](#)

Insights from our customers



Technology is significantly impacting T&L.

"Digitisation of the maritime supply chain system will help solve the majority of the problems we have today and it will bring a lot of improvement into our day-to-day activity".

GS1 can support collaboration between the different logistics partners.

"In interconnectivity, it's important that this language is there across different parties so that the platform is more like a virtual layer that brings everyone together".

Today's operations are not sufficient to meet current trends and customer demand.

"Facilities and transport networks are not built to support the current trends of smaller packages and high volumes. They were built to support retail fulfilment, not direct-to-customer".

GS1 has an opportunity to develop standards for new technology.

"Focus on standards and expand to meet whatever new technology needs can be met".

GS1 T&L strategy milestones & timeline



Vision

End-to-end visibility

throughout the supply chain—from source to consumer

**3-5
years**

Real-time business processes

powered by standardised web APIs, interconnected platforms & registries

**0-2
years**

Development efforts, pilots and partnerships

for standardised web APIs, interconnected platforms & registries

Today

Do more with GS1 standards, services and solutions

by telling new stories to new audiences; focus on last mile, HPL, cross-border & traceability



Maintain momentum of T&L current initiatives



Progress has been made to drive the inclusion of GS1 standards in T&L processes.

This means the direct adoption of our own GS1 standards into different modes of transport, as well as the implementation of other standards that *embed* GS1 standards.

- **Cross-border:** GS1 standards enabling swift cross-border identification
- **Last mile:** Adoption of the CEN Harmonised Parcel Label and SSCC
- **Air:** Electronic bill of lading (FIATA) and piece-level tracking (IATA)
- **Maritime and ports:** Synchronising port and surrounding area operations
- **Road:** GS1 standards enabling electronic consignment note (IRU)

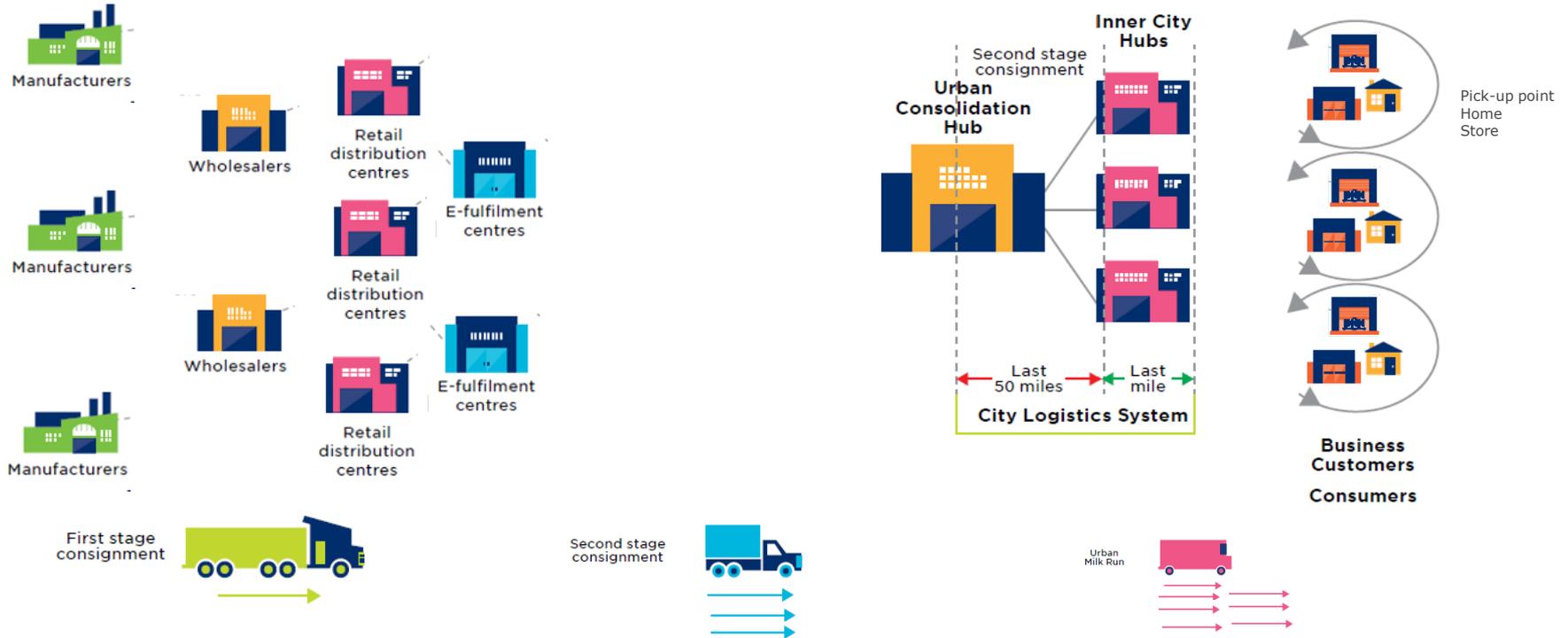


INTERNATIONAL
MARITIME
ORGANIZATION



WORLD CUSTOMS ORGANIZATION
ORGANISATION MONDIALE DES DOUANES

City Logistics in the Supply Chain



Last mile delivery



- **> 5 billion parcels per year**
- **> 25.000 online retailers in Europe**
- **>Thousands of carriers and service providers**

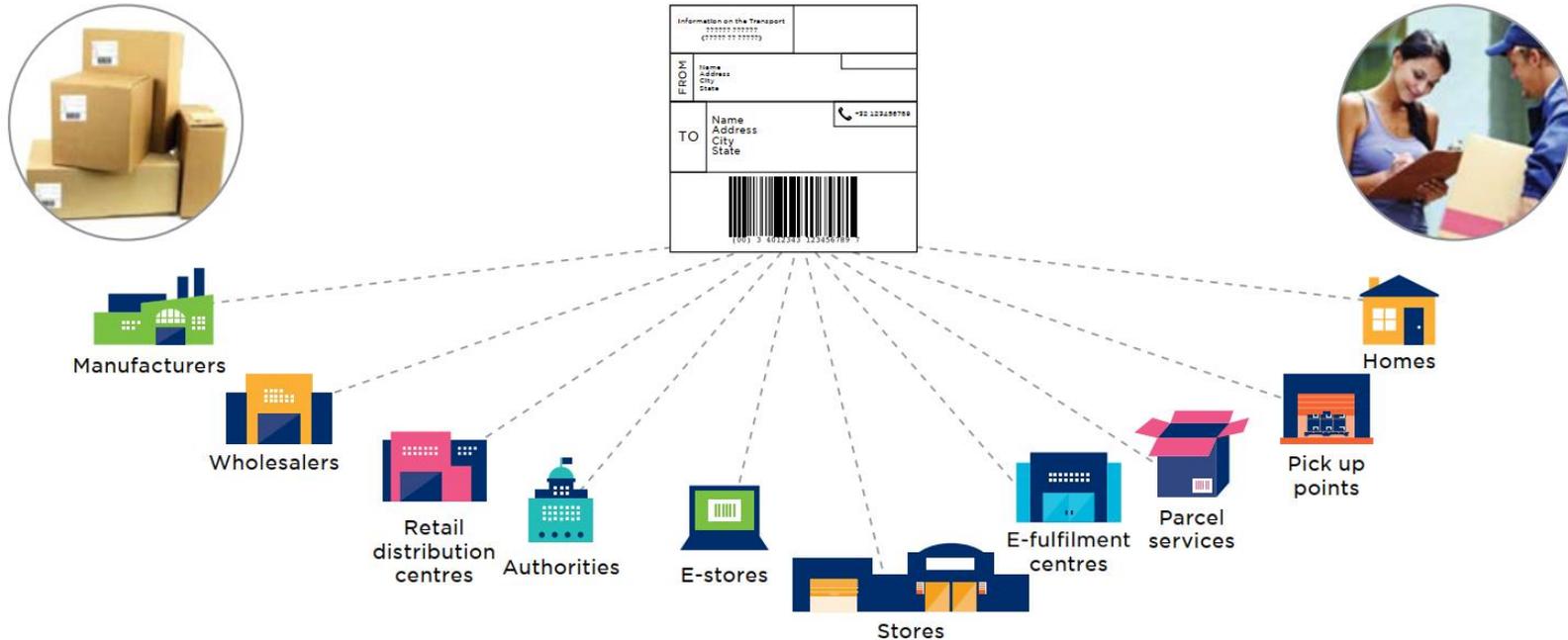
**are waiting
for common standards.....**



The Vision: Harmonised label Used by ALL end-to-end



Created and attached by SHIPPER at origin



How to create worldwide interoperability



Make the SSCC on parcels
even more successful than the
GTIN on products





Parcel = Postal standards: Initiatives, developments, news

Dublin, September 10th, 2018

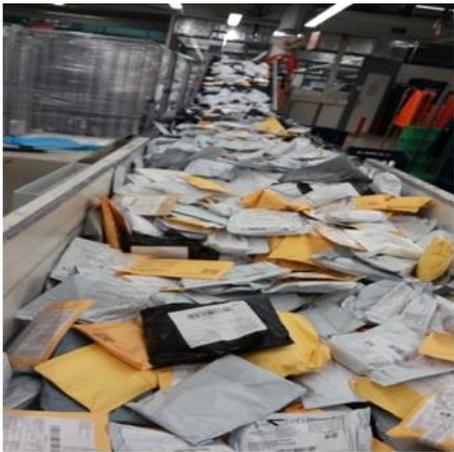


Digital Single Market

Building the next-generation e-commerce ecosystem:
Digital infrastructure meets big data



In the past: Small data for handling big volumes



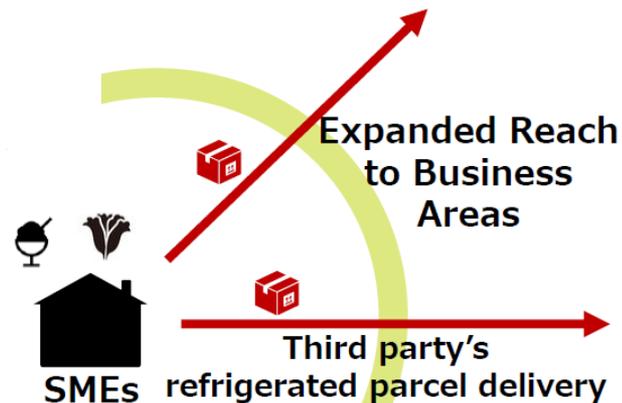
The future: Big data for handling individual items

If it can be delivered, it will be delivered

- **Non-food** ecommerce will be joined by **food** ecommerce

Source: ISO/PC315:

“Indirect, temperature-controlled refrigerated delivery services – land transport of parcels with intermediate transfer”



- **Consumables** and **spare parts** will be supplemented by **3D** Printing

Everything is connected

- Track & trace will be replaced by Electronic Advanced Data (EAD)



Content (Merchandise)
&
Item Identifier (Parcel-ID)

*Item ID provides
access to item content*



Transactional
Mail & eDelivery

- Self-learning infrastructure will re-define **FIRST & LAST Mile**

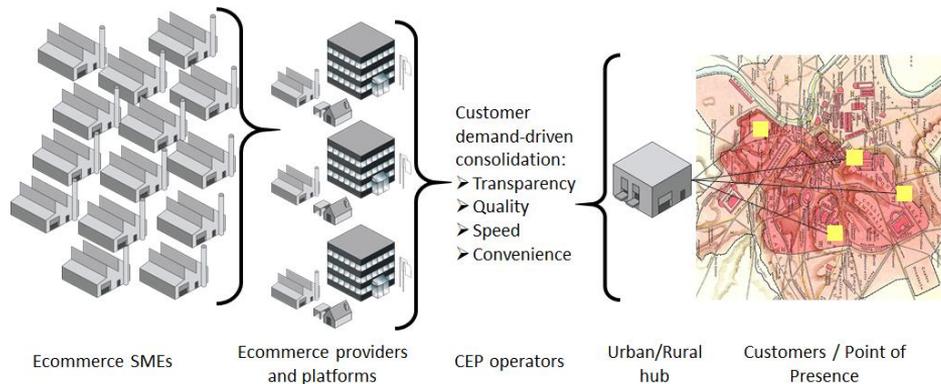


Volume rise → infrastructure evolution

- **2018: More B2C commercial items** delivered in EEA than transactional B2C letters

2023: B2C volume **2x 2018?**

- **Multi-carrier & multi-pipeline consolidation**
- Smart city & smart country



- CEP today: **Wrong vehicles, wrong sorting, wrong business model?**



Legislation sets frame <-> Stakeholders fill it



World Customs Organization
Organisation Mondiale des Douanes





Postal items (Const. art. 1bis.1.6bis)

Documents

Non-priority

Letters/
postcards/
printed
papers
(P, G, E)
Items for the
blind
M bags

Priority

Letters/
postcards/
printed
papers
(P, G, E)
Items for the
blind
M bags

Premium

EMS

Goods

Non-priority

Small
packets (E)
Items for the
blind
M bags

Parcels

Priority

Small
packets (E)
Items for the
blind
M bags

ECOMPRO
parcel

Parcels

Premium

EMS



UPU

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The **wider postal stakeholders**, represented by the **UPU CC**, are actively involved in improving postal services through technical and messaging standardisation

based on

collaboration of all parties concerned, to specify and develop, state-of-the-art solutions, **within the legal and regulatory framework conditions**, nationally, regionally and globally



Electronic Advance Data:

UPU:

WCO-UPU Postal Customs Model

M33-12

M41-7

M42-3

M48-6

M52-1

EU:

UCC (Union Customs Code);
simplified procedures

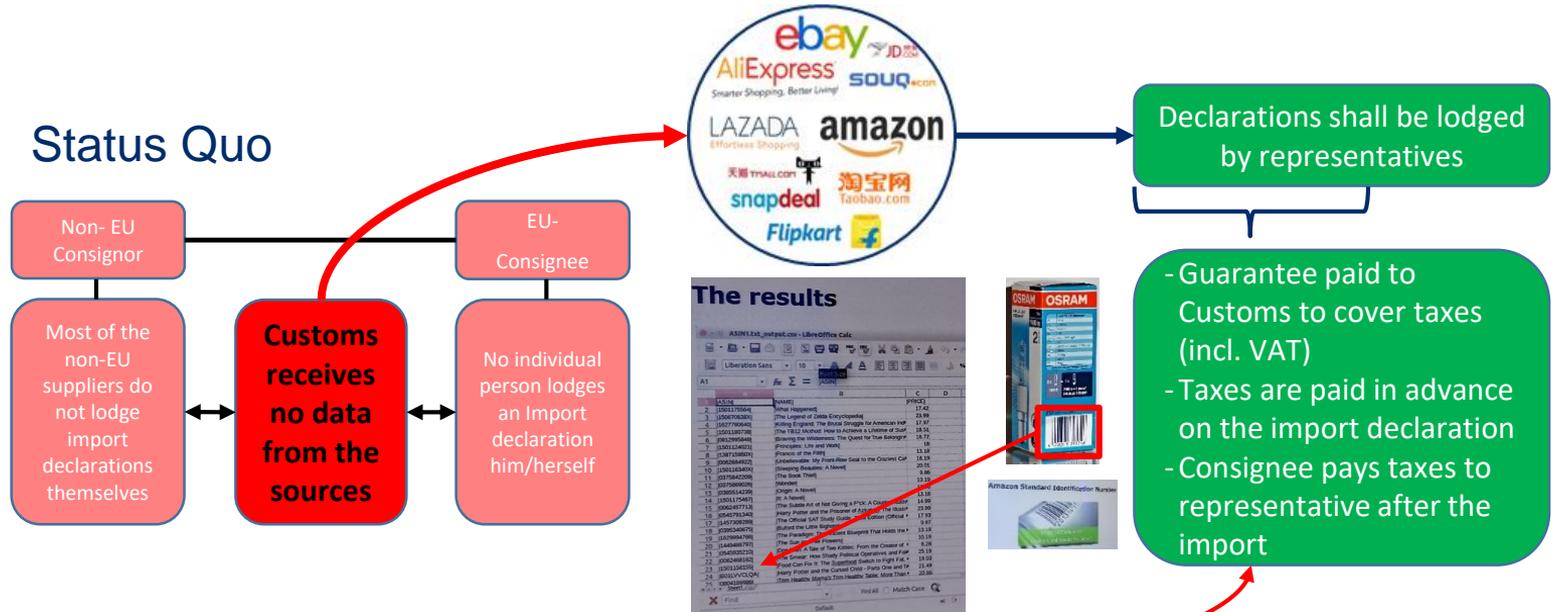
M/548 (Mandate to CEN):

“EAD for customs and transport security”

“Requirements to connect, access,
participate and further develop open global
networks and systems, for postal operators
& the wider postal sector players”

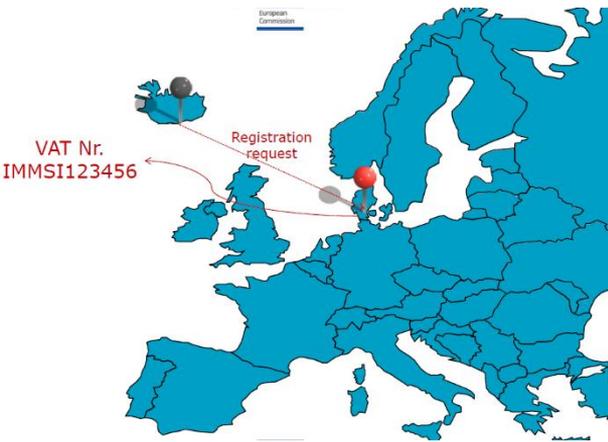
Matching Item ID & Content (cont.)

Based on ONE unique item identifier, customs, transport and inland revenue aim at electronic advanced data to know what is in the shipment, its value and related lifecycle management

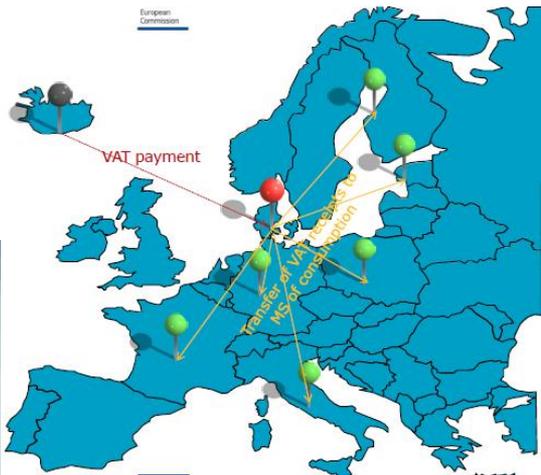
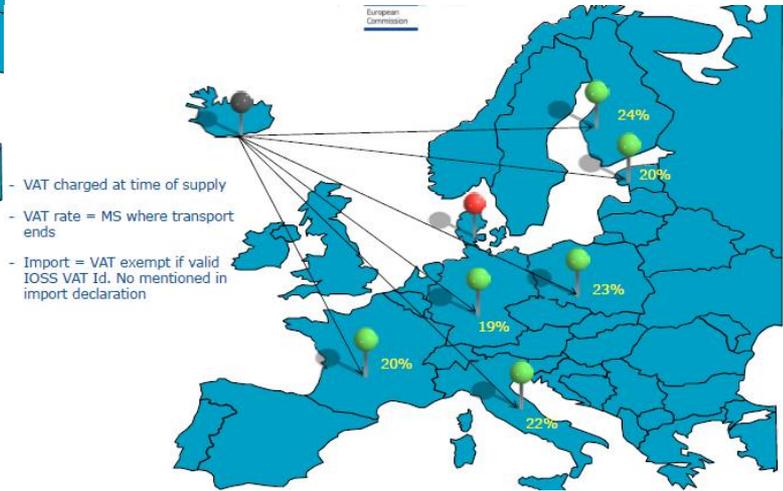


Import One Stop Shop

Fiscal Representation – Extension of the Value Chain



Taxable persons not established in the EU must be represented by an intermediary. The taxable person established in the EU or intermediary must register in the MS of his business or where he has a fixed establishment



To be made monthly (by the end of the following month)
The MSI transfers the VAT to each MSC at the latest 20 days after the end of the month during which the payment was received





UPU

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Electronic Advanced Data (EAD) – (cont.)

F3a	Entry summary declaration – Express consignments – Complete dataset	
H6	Customs declaration in postal traffic for release for free circulation	Art. 5(12), 162, and 201 of the Code
I1	Import Simplified declaration	Art. 5(12) and 166 of the Code

An optimal dataset for the customs clearance of low value goods for release for free circulation for the purpose of the supplantation of 144 of the UCC-DA by any economic operator, was based on the dataset of the current M33-12 of the UPU



New products and service

UPU:

IPP / IRP

S19

S67

NWI:

„Standardization of postal labelling and interoperability – towards a strengthened role for the UPU”

EU / Global:

X-border parcel Regulation (May 2018)

CEN/TS17073 „Interfaces for cross-border Parcels“;

CEN/NWIP: „Postal services – Packaging for boxable items“;

ISO/PC315:

“Indirect, temperature-controlled refrigerated delivery services – Land transport of parcels with intermediate transfer”



III. Main risks for designated operators

8 France is of the view that the use of labelling standards that focus solely on the global postal network does not meet the freight transport market's expectation of optimal interoperability between designated operators and other stakeholders.

9 If nothing is done, designated operators may have to double-label postal items to ensure interoperability between all stakeholders in the supply chain.



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Non-exhaustive examples

Secured electronic Postal Services

UPU:

Convention Art. 10

S43a

S43b

S52

S64

S68

EU:

eIDAS Reg. & GDP Reg.

CEN/TS15121 1

CEN/TS15121-2

CEN/TS16326

ETSI/EN 319 522

ETSI/EN 319 531

Interoperability framework S52 & EN319 522



Thank you for
listening.

Walter Trezek

Ecommerce Europe: CO-Chair, e-Logistics WG

European Committee for Standardisation (CEN):

TC 331, WG2 “New digital postal services”

Convenor & Secretary.

Liaison officer of CEN to ETSI TC ESI

EEA Project Leader “EAD for Customs and
Transport Security”

Universal Postal Union (UPU):

Chairman of the Consultative Committee &

Liaison officer of CEN to UPU





City Logistics and Last Mile Where do they fit into future Supply Networks?

Fernando Liesa; ETP-ALICE; MD

10th September 2018; GS1 Industry & Standards Event 2018; Dublin

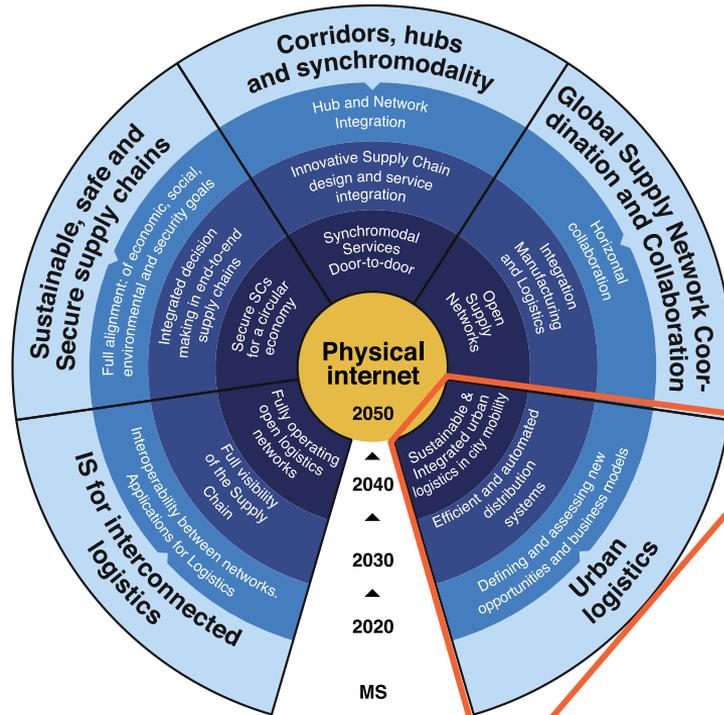


Who is Alice ?

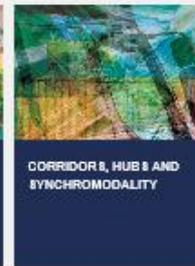


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Research and Innovation Roadmaps



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The Global Language of Business

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The CHALLENGES OF URBAN LOGISTICS



- deliveries increase and generate pollution, congestion and noise
- the cities expand
- trucks are an accident risk
- the trucks park anywhere
- the regulations are not respected
- the city centre is not attractive enough
- I want to preserve the historic centre



- I do not want to wait
- to be delivered faster and do not pay more
- ability to change location, time and day of delivery
- manage returns
- give a note to my carrier
- to be delivered by appointment and be constantly informed

- deliver more often, faster, later
- restriction in access to urban areas
- the regulations keep changing
- they say that I pollute
- how to deliver during pollution peaks
- recipients often absent
- delivery places are not available
- traffic jams reduce my productivity
- Social status is low (low pay, long work hours...)

The need for collaboration in City Logistics



- **Over 50% of world population lives in (congested) urban areas today. Expectation is >70% by 2050.**
- City Logistics is an extremely costly component in the end-to-end logistics supporting Value Networks.
- In Europe, City Logistics represents **28% of the total transport costs and contributes up to 50% of total traffic air pollution.**
- Very low load factors for city delivery vehicles; 38% for London vans in some cases utilization rates are as low as 24%.
- **Delivery** to these areas becomes **increasingly unsustainable.**
- Collaborations of various kinds are required to address the issues in City Logistics environment.
- European Policy targets 2030 for zero CO2 emissions in cities.

Key principles for improving City Logistics



- **Cooperation, trust and quality partnership**
replacing ownership and exclusivity
- **Costs for logistics** optimised, transparent and recognised
- **E-commerce seen as opportunity and not as a problem.**
Responsible behaviour and cultural change from individuals are fundamental.
- **Moving goods and not vehicles**
- Continuation of innovation and market uptake of new business models

City Logistics is a real game-changer as innovation key driver for the Last Mile, having a huge impact in the logistics supply chain

ALICE vision on City Logistics



Achieve full integration of freight flows operations and activities

ALICE overall targets, addressing the EU goal to

“Achieve CO₂-free city logistics in major urban centres by 2030”:

- Increase **energy efficiency**, which can be achieved by improving the efficiency of the whole urban logistics system
- **Improve the urban environment** by increasing air quality and reducing noise.
- **Increase customer satisfaction** by delivering the goods on time and improving the reliability of the system.
- **Increase safety and security** reducing injuries and fatalities and also cargo lost or damage. Reducing risk of using trucks for terrorist attack.

Urban Freight Research Roadmap

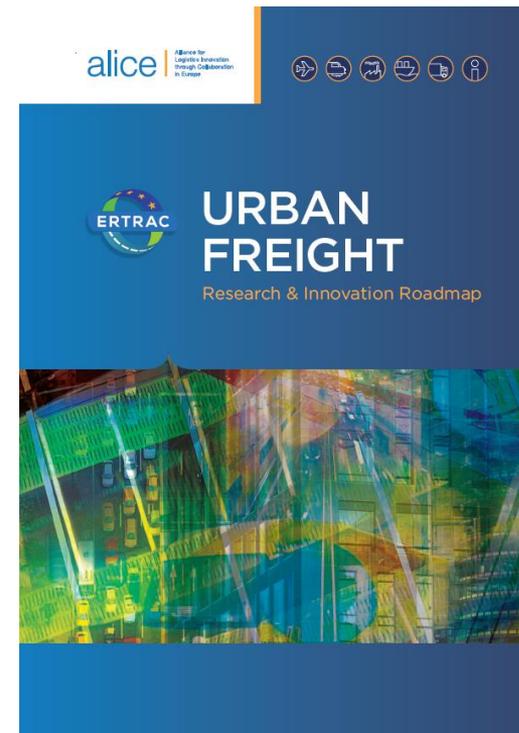


Research Roadmap on urban freight and logistics delivered jointly by **ERTRAC** and **ALICE**

Goal

Identify research priorities related to urban freight, returns and city logistics and to contribute to the definition of research programs for the actors of the sector.

Developed in 2014 and updated in 2016.



NEW RESEARCH TOPICS - IMPLEMENTATION PLAN 2018 - 2020



- Logistics in the full circular economy: New business models for **horizontal and vertical collaboration**
- Exploring new opportunities for achieving effective integration of urban freight and personal mobility services and networks
- **Improving the link between urban and long distance freight** transport services and infrastructures
- New business models for logistics services based on sharing economy
- Bringing Logistics into urban planning
- **Interoperable standards** for (modular) transport units' operation in the urban context
- Safety and security in urban freight

Collaborative innovation day - Validating ideas with the community



1 - **SULP** (Sustainable Urban Logistics Plans):

SULP is a specific Plan for designing logistics solutions within mid-term horizon and managing urban freight processes. It should consider the integration between networks and operations, the improvement of the **interaction between long distance freight transport and urban freight** including also the regional area.

2 - Private and Public collaboration; new procurement strategies. **Local authorities could encourage** zero emission transport, stimulating **operators to provide more sustainable transport** solutions via procurement strategies, which should **properly consider** the development of **city hubs** such as urban or extra-urban consolidation centres.

Collaborative innovation day - Main recommendations



1 - More attention to city logistics planning and development is needed from city authorities in SULP.

- Currently measures are focused on banning diesel trucks and other restrictions for the movement of goods.
- This should be accompanied with clear measures and clearer understanding and planning of logistics activities in cities to ensure citizens have

Aim:

Ensure citizens in cities have **proper access to services and goods** as well as **good living conditions**

From the collaborative innovation day: Main recommendations



2 - Increased Public-Private Collaboration is needed in the City Logistics domain. Some cities are facing problems of congestion and emissions.

In order to make efficient and smart use of city transport infrastructure, a model for the city logistics needs to be developed and further **private-public collaboration** can support further integration of traffic flows in cities.

ALICE members see **opportunities to engage with authorities in cities** (and regions) to improve City Logistics and the link with regional and long-distance transportation

Collaborative Innovation Days

Addressing challenges of ecommerce in city logistics

Rome, September 27th

alice

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In collaboration with:

Posteitaliane



2018

- Share an overview of the state of play of ecommerce implications on city logistics and related impacts.
- Share and discuss achievements, challenges and opportunities addressed by new and ongoing projects/initiatives and Start-ups.
- Discuss and agree on next steps and research and innovation needs in the application field of city logistics.

Questions addressed:

- How is ecommerce impacting city logistics? Which are the opportunities and threats?
- How can eCommerce be an opportunity to drive 0-Emissions City Logistics in 2030?
- Which are the most prominent use cases in the area of city logistics?.
- What Research and Innovation is needed to get the best out of eCommerce?

Questions & Discussions



BREAK

Please be back in 30 minutes