Scan4Transport
Enabling freight to talk

S4T
Scan4Transport

Delivering digital capability in the transport process

Scan for more information

IPIC-2023

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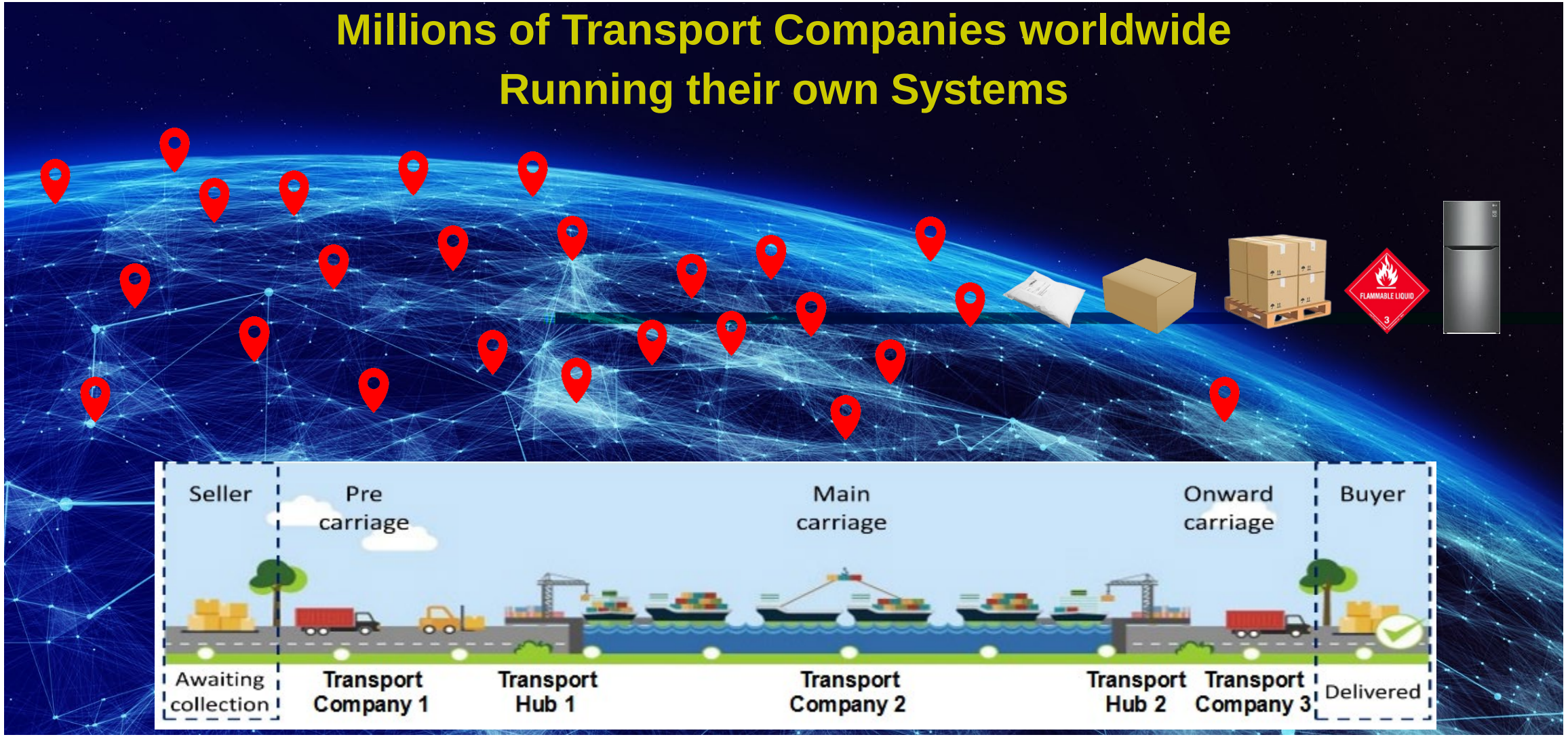
13-15 JUNE 2023 Athens, Greece
www.pi.events/IPIC2023

Agenda

- The Challenge – What is the Problem?
- What could be the Solution?
  Scan4Transport standard
- How does Scan4Transport help?

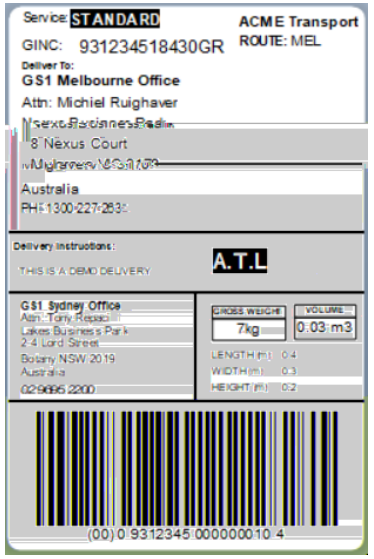
Challenge - Fragmentation



Overabundance of identifiers & no common data format

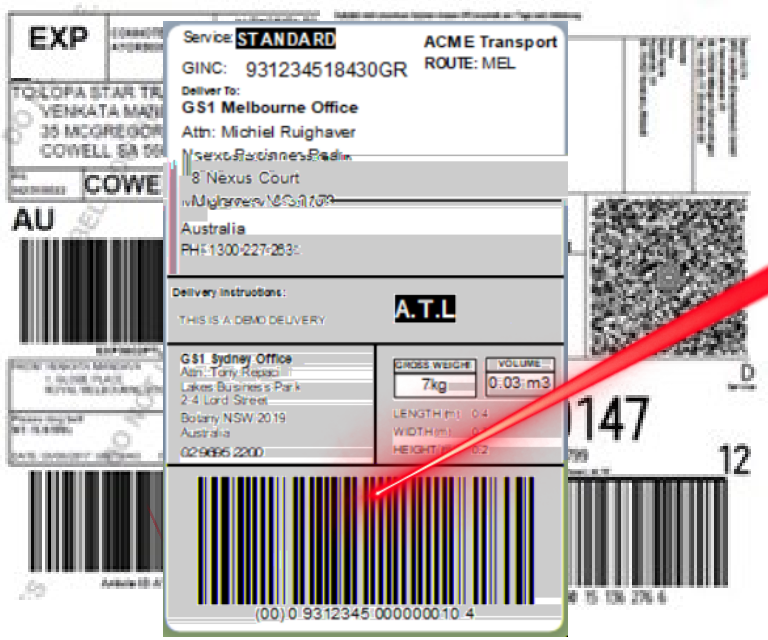
Multitude of Transport Labels

- Each Logistic Service Provider insists on its own format
  - Causing big headaches for Shippers in Despatch processes
    - Causing relabelling at each handover



Lack of required information

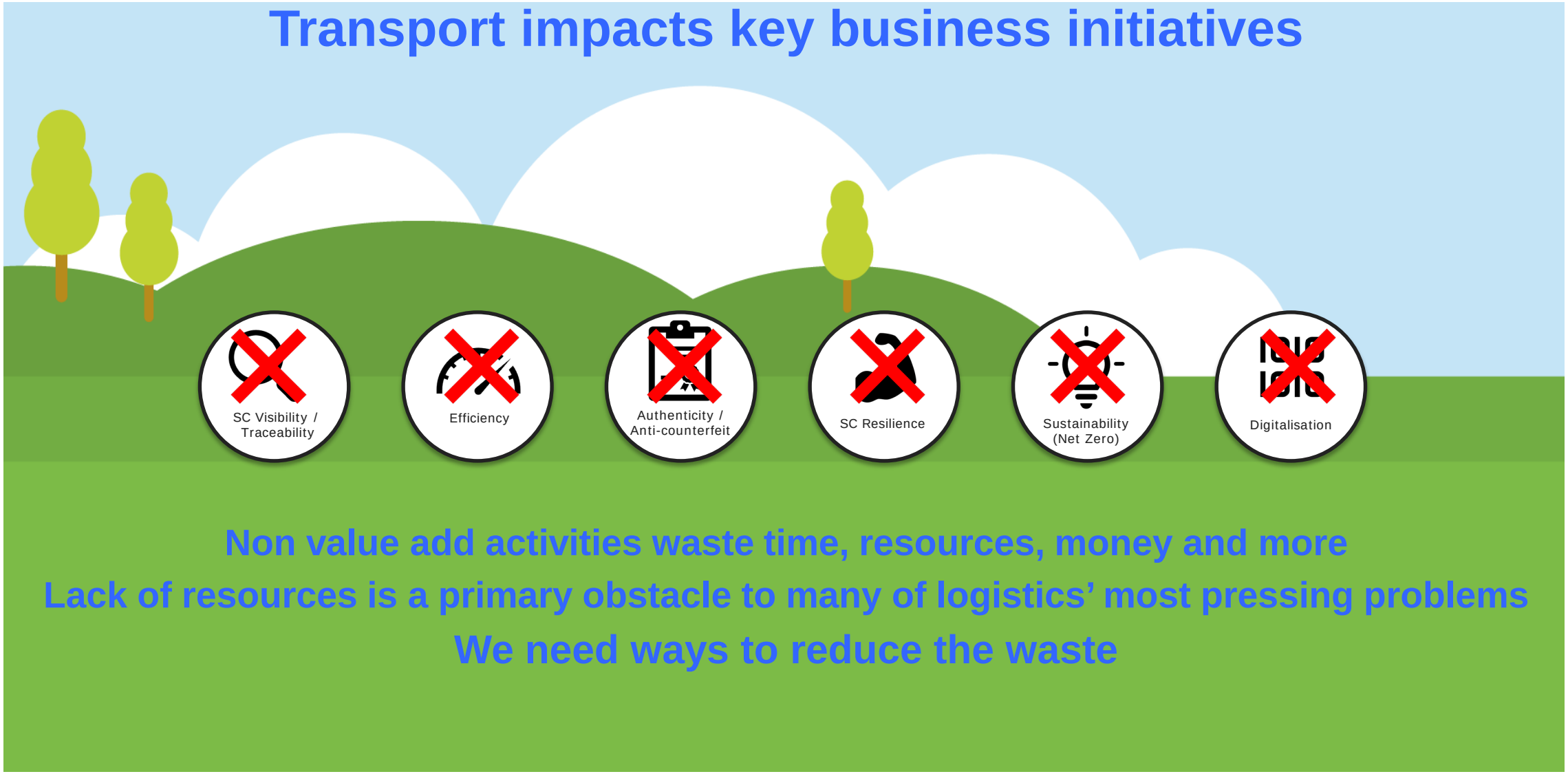
Many (SME) transport operators do not receive advance information



Requiring manual processing of data on the Transport Label

Why is this a Problem?

Transport impacts key business initiatives

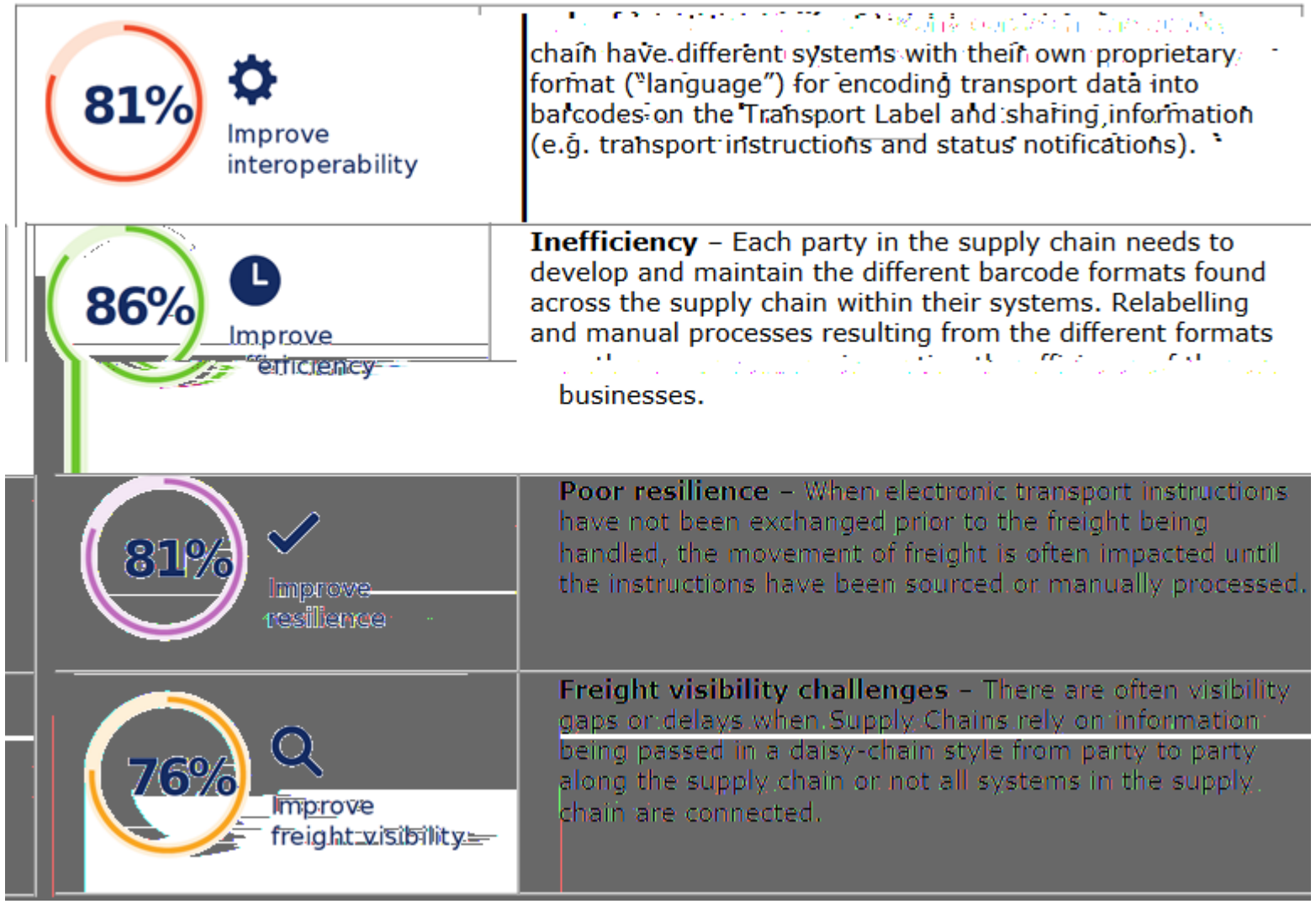


Non value add activities waste time, resources, money and more

Lack of resources is a primary obstacle to many of logistics' most pressing problems

We need ways to reduce the waste

Industry Survey Confirms

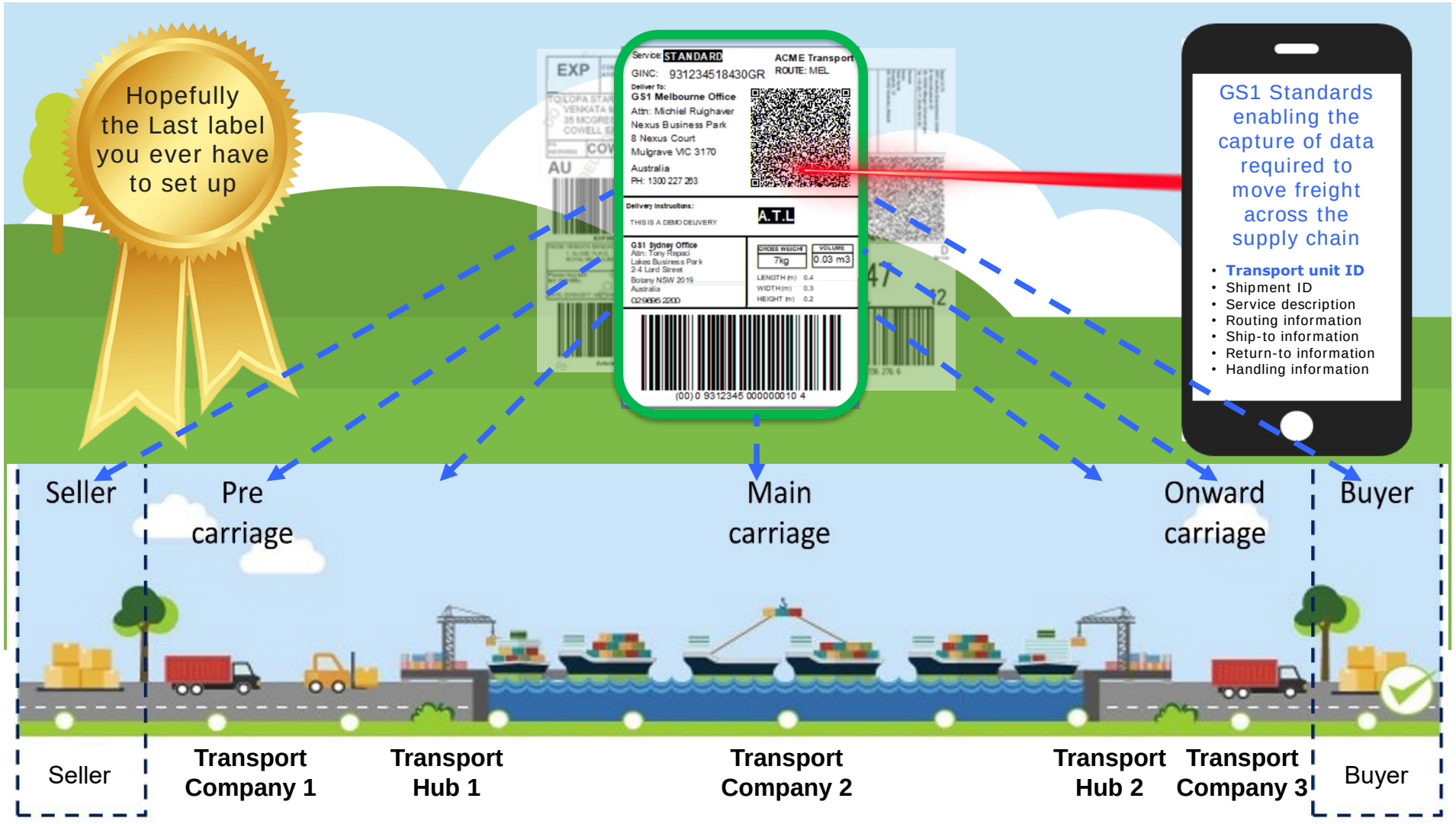


- More than 4 out of 5 respondents indicate major improvements are needed in transport of packaged items related to
  - Interoperability
  - Efficiency
  - Resilience
- 3 out of 4 respondents feel that visibility about the progress of transport execution must be improved

How may we solve the Problem? Scan4Transport

- Making structured data available on the box

Scan4Transport – Developed by Industry for Industry



All Required Information is on the box

The 2D barcode contains the structured data for transport execution

- The globally unique identifier for the transport unit
  This is a mandatory data-element. Without it the S4T standard cannot deliver its full potential
- Basic data about the transport unit
  Weight, dimensions, volume, returnable asset identifier (e.g., for roll-cage, pallet or container)
- Trade and Transport Reference identifiers
  Identifiers for the Trade Transaction (shipment) and Transport Contract (consignment)
- Ship-to / Return-to information
  Address data, geo/GPS-coordinates, identifier for the ship-to location, contact details
- Handling instructions
  Dangerous Goods flag, delivery window, Signature-required, Authority-to-Leave
- A Digital Link (URL / URI)
  This enables the operator to access remote information in case Internet connectivity is available

https://visibility.Seller.com/00/195212342345678909?3301=000045&3312=000030&3322=000040&3332=000050
&4300=GS1+New+Zealand+(Auckland+Office)&4302=Level+5%2C+25+College+Hill&4304=Freemans+Bay&4305=Auckland&4307=NZ&420=1011
&4308=%2B64098209088&4309=053151820317474946 60&4323=1&4324=2306300900&402=95212340000000012
&410=9429300016329&s4t

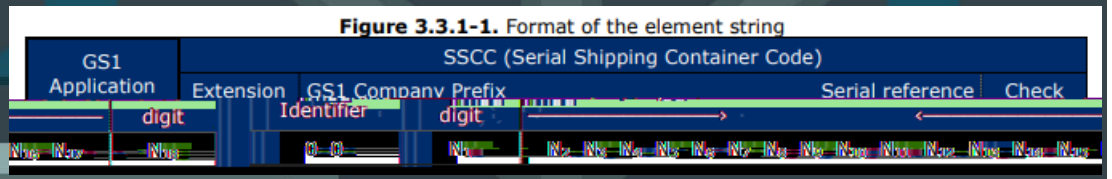
Scan4Transport
“enables freight to talk”

S4T Website

Improved Interoperability

Consistent Label Data Standards
No Need to Relabel

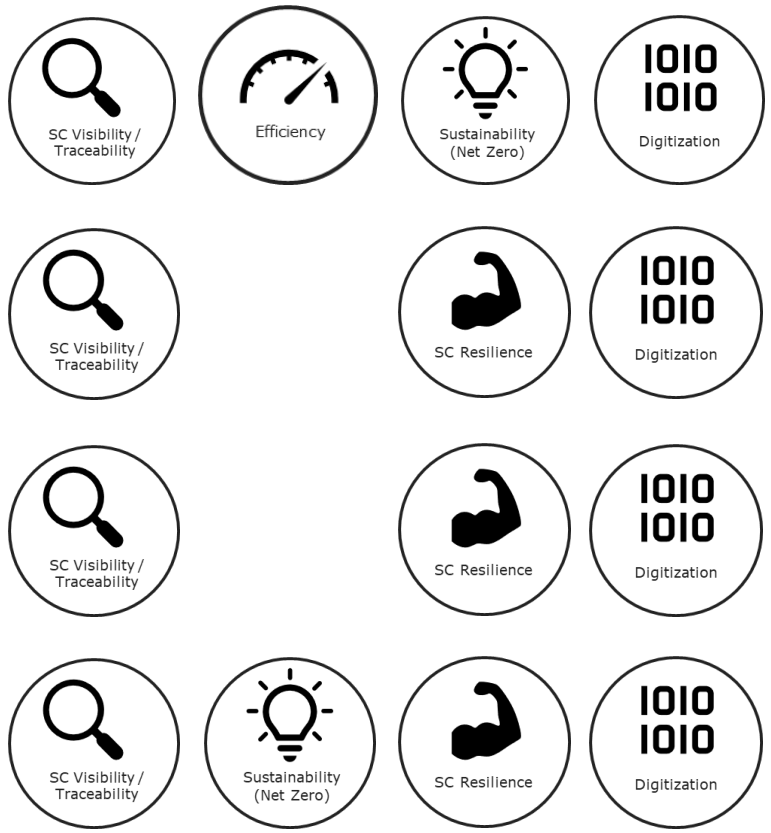
Consistent Transport Unit Identifier Across Journey



Enhance Process

All required info is on the box

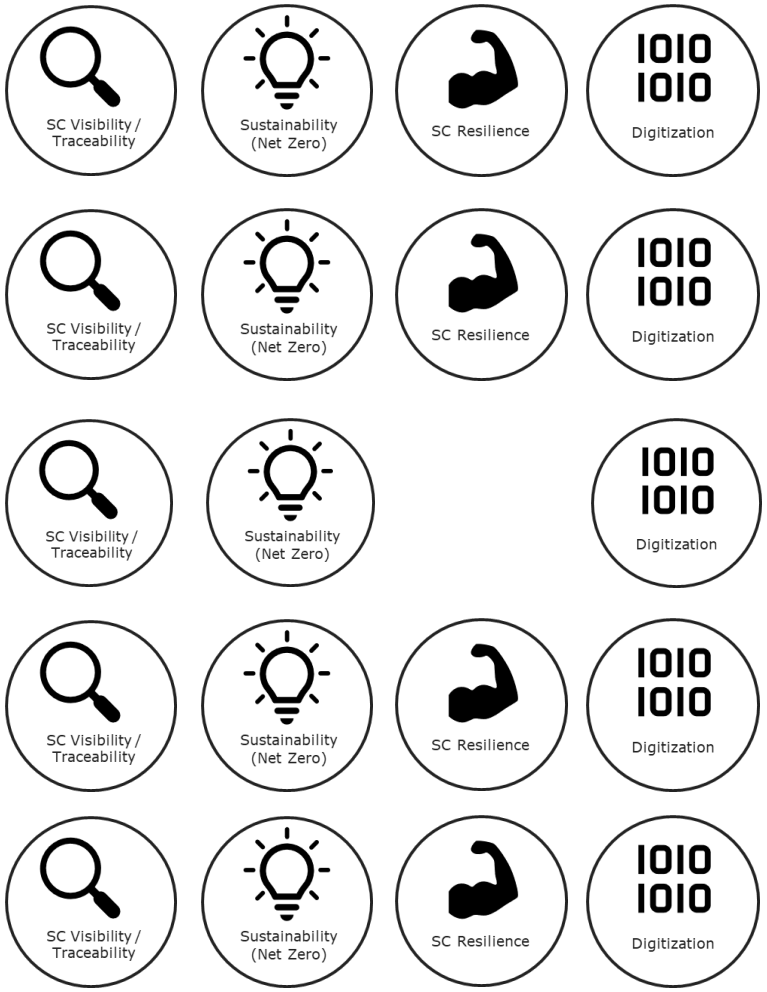
- Weights and dimensions for
  - better planning
  - prevention of injuries
- Prevent (un)loading errors using consignment information
- Improved safety and compliance e.g., hazardous materials
- Geo/GPS-coordinates enabling accurate delivery everywhere



Increase Customer Satisfaction

All required info is on the box

- Shipment information to keep transport units together for final delivery
- Understand service requirements
  - Speed of delivery (e.g.,express)
  - Delivery Window
- Keep recipient informed contact details
- Reduce failed deliveries
  Signature-needed vs Authority-to-Leave
- Simplify Reverse Logistics
  Return address



How may we solve the Problem? Scan4Transport

- Enabling dynamic interaction with stakeholder systems

What systems may be accessed?

- Any system that is connected to the Internet e.g.,
  - Seller's Delivery Visibility platform
  - Logistic Service Provider (LSP) own system/s
  - Any third-party systems, which includes
    - Other LSP system/s
    - Registry Platforms for Locations or Organisations

Accessing the Seller's Visibility Platform

Why should you do it?

- **Delivery location may have changed**
  - Geo/GPS-coordinates may have been added
  - Address details may have been corrected
- Delivery date and/or time may have changed
- Delivery Instructions may have changed
  - Signature-Required vs Authority-to-Leave
- Information e.g., related to the Sales Order/Shipment may not be on the box
- **Confirm Delivery to the Seller**

https://visibility.Seller.com/00/195212342345678909?3301=000045&3312=000030&3322=000040&3332=000050
&4300=GS1+New+Zealand+(Auckland+Office)&4302=Level+5%2C+25+College+Hill&4304=Freemans+Bay&4305=Auckland&4307=NZ&420=1011
&4308=%2B64098209088&4309=053151820317474946 60&4323=1&4324=2306300900&402=95212340000000012
&**410=9429300016329**&s4t

Accessing a Third-Party Registry

Why should you do it?

- You may use the **Ship-to Location ID** to access a reliable source (e.g., industry or governmental).
  - **Find out more about the Delivery Address**
    - Address details may be checked
    - Geo/GPS-coordinates may be found
    - Opening hours
    - Access restrictions
    - Related Organisation information
    - And much more
- As subcontracting LSP, access the outsourcing LSPs system using the **Transport Unit ID** as the primary key. The LSP system may offer similar functionality as the Seller's system on previous slide, including Confirmation of Delivery

https://Registry.ThirdParty.org/00/195212342345678909?3301=000045&3312=000030&3322=000040&3332=000050
&4300=GS1+New+Zealand+(Auckland+Office)&4302=Level+5%2C+25+College+Hill&4304=Freemans+Bay&4305=Auckland&4307=NZ&420=1011
&4308=%2B64908290988&4309=053151820317474946608&4323=1&4324=2306300900&402=95212340000000012
&**410=9429300016329**&s4t

Accessing a Third-Party Registry

How do you do it?

- Directly (knowing the platform address)
  - https://www.nzbn.govt.nz/mynzbn/opndetails/9429000000000/9429300016329/
    In this case the NZ Government Platform for Business Numbers & Organisation Parts
  - https://www.portmasterdata.com/id/9429300016329
    In this case the Global Location Data Platform demo application
- Indirectly e.g., via GS1 Resolver

  https://id.gs1.org/414/9429300016329

  In this case there is a default target associated with the GLN

Demo GS1 NZ Auckland - NZBN

< BACK TO GS1 NEW ZEALAND INCORPORATED (NZBN 9429000000000)

+ VIEW 4 ORGANISATION PARTS:

ORGANISATION PART (3 OF 4) << PREVIOUS NEXT >>

GS1 New Zealand (Auckland Office)

Organisation Part Number	9429300016329
Purpose	MOH Covid Poster Location
Phone Number	64 09 8209088 (Other)
Email Address	support@gs1nz.org (Contact Detail)
Physical Address	Level 3, 25College Hill Freemans Bay Auckland New Zealand 1011
Status	ACTIVE

< BACK TO GS1 NEW ZEALAND INCORPORATED (NZBN 9429000000000)

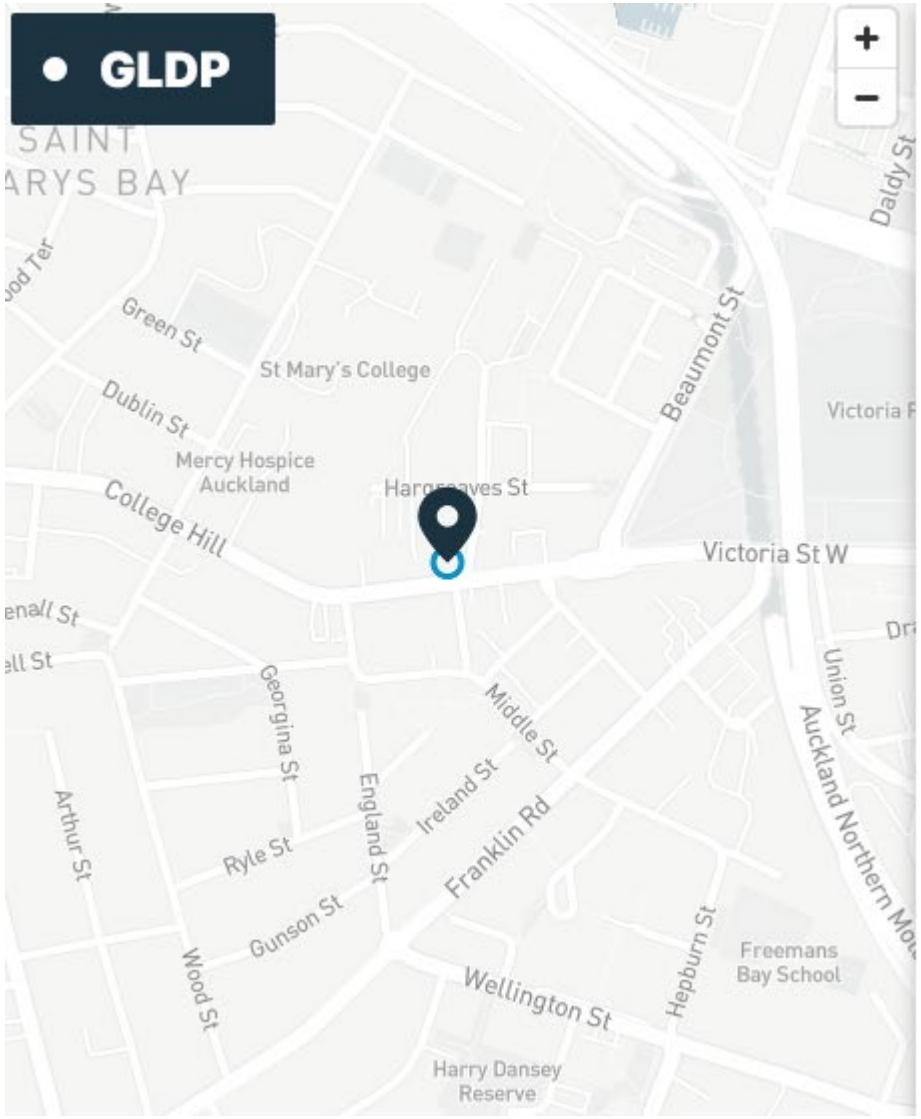
— VIEW 4 ORGANISATION PARTS:

NAME	OPN	PURPOSE
GS1 New Zealand Wellington (Head Office, Ground Floor)	9429302695232	MOH Covid Poster Location, Courier Drop Off
GS1 New Zealand (Christchurch Office)	9429300016626	MOH Covid Poster Location
GS1 New Zealand (Auckland Office)	9429300016329	MOH Covid Poster Location
GS1 New Zealand Wellington (Head Office, 2nd Floor)	9429300016183	MOH Covid Poster Location

NZBN
NEW ZEALAND BUSINESS NUMBER

Search the NZBN Register

Demo GS1 NZ Auckland - GLDP



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GS1 New Zealand (Auckland Office)

Verified & Audited

Global reference

Assigned id:	9429300016329
GCP	942930

Position

Latitude:	-36.8481797
Longitude:	174.749466

Attributes

Name:	GS1 New Zealand (Auckland Office)

GS1 linked data

Title	Link relationship type	Media type	Language
NZ Location Registry	https://gs1.org/voc/masterData	text/html	

Demo GS1 NZ Auckland – Seller Site

ACME

Your order:
95212340000000012

Delivery to:

GS1 New Zealand (Auckland Office)
attn. Michiel Ruighaver
Level 3, 25 College Hill
Freemans Bay
Auckland
New Zealand (NZ)
1011

Additional information Deliver to
GLN: 9429300016329
New Zealand Business Number Registry

Global Location Data Platform (GLDP)

Delivery Instructions:

Do not deliver before 30 June 2023, 09:00 local time.
Obtain signature from recipient.

Tracking ID for your package:

1952123423456789O9

Package details

Weight: 4.5 KGM (Kilogramme)
Length: 0.30 MTR (30 centimetres)
Width: 0.40 MTR (40 centimetres)
Depth: 0.50 MTR (50 centimetres)

https://fixlog.consulting/1952123423456789O9

Products included in your package

Product Code	Description	Quantity
95261000003455	Tablet Computer	1
95264000006785	Tablet Computer cover "Don't touch me"	1

Tracking details for your Package/Item

Event	Where	When
Item in hands of first carrier	Seller's Warehouse Melbourne Australia; GLN: 9526678000124	25 June 2023, 15:45 (local time)
Item	Melbourne International airport, Australia; GLN: 9527080003451	25 June 2023, 22:50 (local time)
Item arrived in destination country	Auckland International airport, New Zealand; GLN: 9528108000896	26 June 2023, 4:05 (local time)

ACTIONS

Confirm Delivery

Confirm Collection

In Conclusion

- With Scan4Transport the **minimum required information is on the box**
- Scan4Transport facilitates the **seamless collaboration of ALL stakeholders** involved in transporting Goods from Seller to Buyer, be they large or SME operators
- Scan4Transport **helps eliminate waste** from current transport and logistics processes
- Scan4Transport dynamic access to various sources of information
  enbables new ways of working in transport and logistics

Scan4Transport links the Physical Internet with the Digital Internet

Discussion

Questions and Answers

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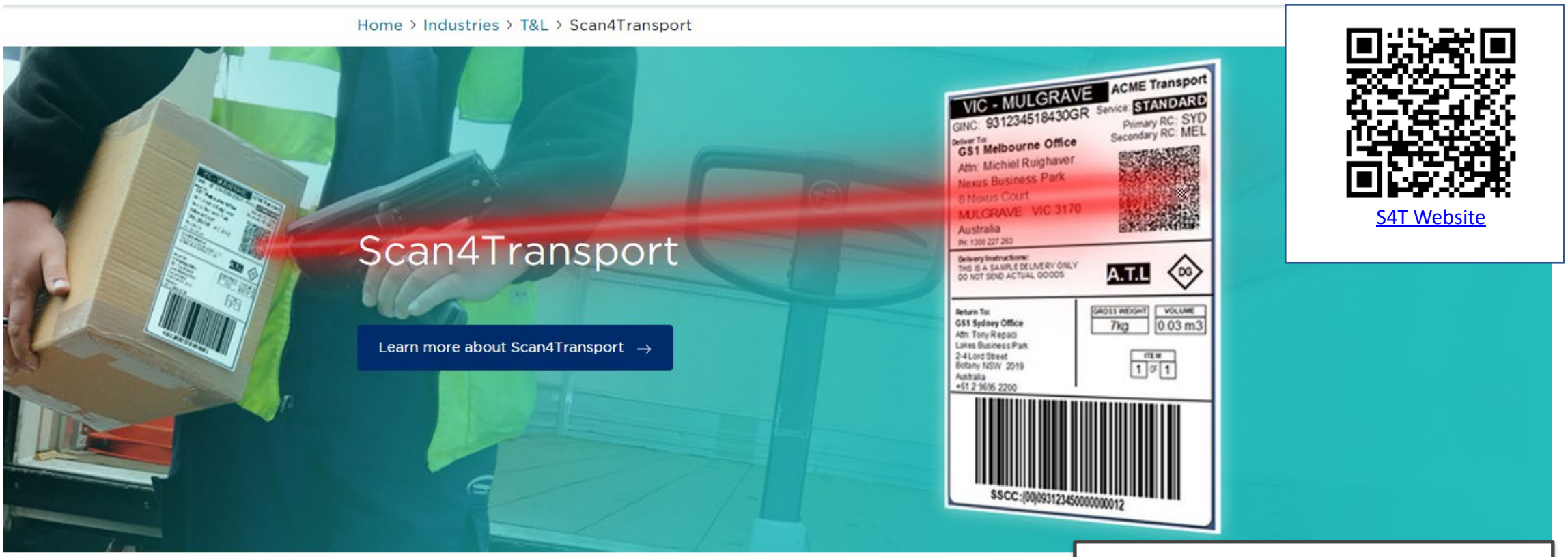
Back-Up Slides

- Where to find more information

Leverage the Scan4Transport Website



S4T Website

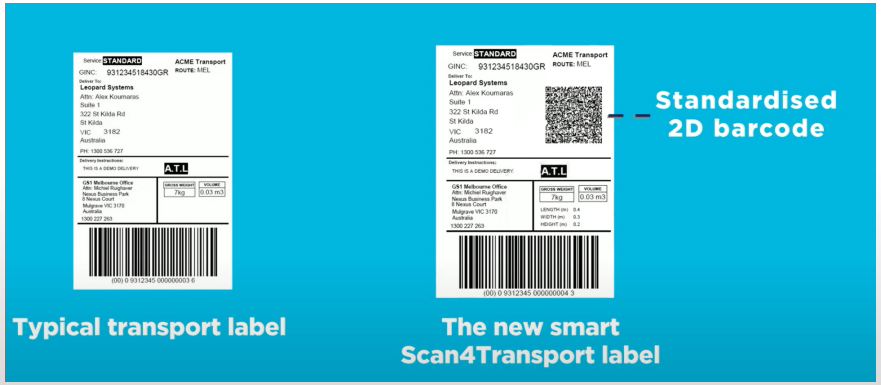
Scan4Transport is a global standard for encoding transport data on a Logistics Label. The standard supports companies across the transport process including first mile, sortation and last mile activities and enables them to keep pace with the

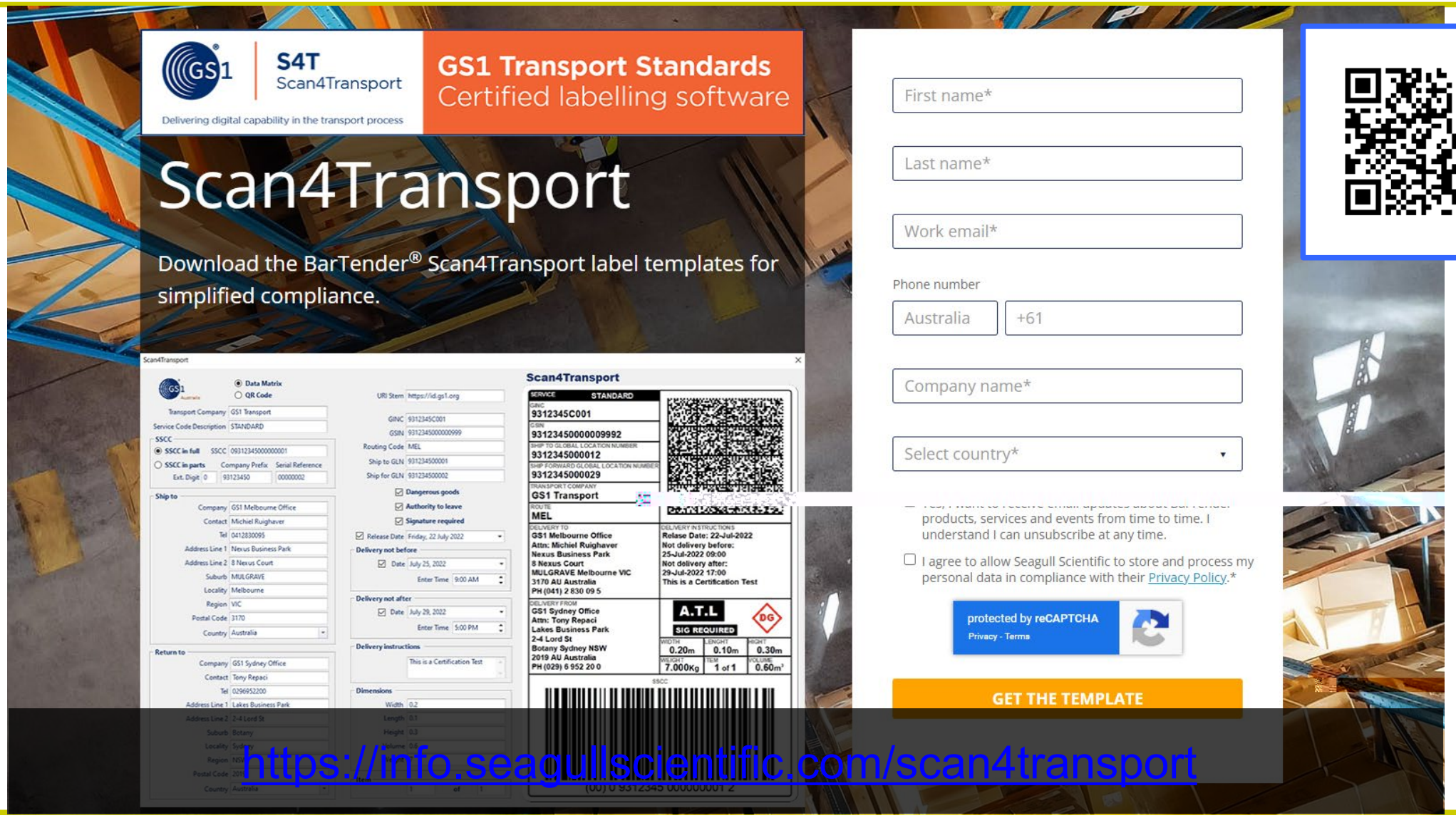
www.gs1.org/industries/transport-and-logistics/scan4transport

- Informative docs/videos
- Scan4Transport Guideline
- Pilot report/video
- Demo/implementation tools
- GS1 DigitalLink video

Scan4Transport – A Tale of Two Labels

LEOPARD Systems



https://www.youtube.com/watch?v=xz1kSiJoK-4

Scan4Transport - Full Support from Global Label Creation Solution Provider