

IF THESE LABELS COULD TALK

GS1's Michiel Ruighaver discusses how the Scan4Transport standards are set to revolutionise elements of the freight transport process globally.

Across Australia, more than 40,000 logistics service providers are translating shipping data from barcodes on freight labels every day. Those barcodes are translated and often replaced along the way, to support the custom languages used by the plethora of proprietary systems used by each link along the chain. As freight leaves Australia, that process multiplies across the millions of logistics and freight providers that need to work together.

It's a system that baffles Michiel Ruighaver, T&L Manager at GS1's Scan4Transport Centre of Excellence.

"The freight transport industry is extremely fragmented," says Michiel. "Most of the businesses across the supply chain use different systems, each with their own proprietary standard for encoding data into or capturing data from barcodes on the freight label."

As a result, he says it's like clashing cultures having to learn and translate different barcode languages just to share information. He sees it as such an unnecessary level of complexity which is making every player in the supply chain lose out.

"This causes manual processes, duplicated effort, increased costs, decreased freight visibility and significant gaps for companies across the supply chain, because freight is so often handled by multiple logistics service providers in the journey from A to B," he says.

He compares the current situation to a world where there would be no internet protocols.

"Imagine how challenging life would be if there were no global email standards," he says. "You would need to setup a new program or template every time you wanted to exchange an email with someone who uses a

different email program than you, for instance Outlook versus Gmail."

Instead of just remaining baffled by the situation, Michiel and the Scan4Transport Working Group have done something about it. They have developed a common language, the Scan4Transport Standard, that is just starting to be introduced this year.

The new Scan4Transport Standard is a global language for encoding the minimum data required by parties across the supply chain to enable the freight transport process into a 2D barcode. This information includes a globally unique freight unit identifier (Serial Shipping Container Code – SSCC), ship-to information (e.g. company, contact, address, phone number, etc), handling information (e.g. routing codes, service descriptions, authority to leave the freight at the delivery point if no one is available to receive the goods, etc) and return-to information (e.g. company, contact, address, phone number, etc).

Michiel notes that the Scan4Transport standard is technology agnostic and can be incorporated into existing systems across the supply chain to enable everyone to "talk a common language." He says this will make it so much easier and cost effective for businesses to adopt technology and to interact with each other.

The lead up to the standard being released began in response to shippers and logistics service providers in Australia seeking a more standardised way to share this information to improve efficiency, interoperability, connectivity and visibility challenges.

These companies contributed to the GS1 global standards development process with many other logistics service providers, shippers, solution providers, industry stakeholders and



Michiel Ruighaver

GS1 member organisations from 21 countries around the world; making it a truly collaborative process.

The group's work was officially ratified in August 2020 as an open global standard, known as Scan4Transport; and now being embraced by working group participants and early adopters around the world. Pilots started early in January 2021 including major companies from Europe, the United States, Australia and New Zealand.

Michiel notes that the Scan4Transport standard is truly global, in that it supports languages using Latin characters, such as the English language, and non-Latin characters, such as Japanese.

It is in creating this truly global language that Michiel and GS1 see so much potential for improving supply chains around the world.

"Just like a road authority manages and communicates the ownership of licence plates for cars, GS1 licenses numbers to generate globally unique identification keys identifying parties such as companies, locations and items such as freight across the supply chain," Michiel explains.

The GS1 standards define the type of barcode symbols to use, symbol characteristics such as size, and

data structures such as date formats for encoding data into a barcode. That data could be, for instance, the format of a required delivery date. This ensures that the data is captured accurately and consistently across the supply chain.

Because the GS1 standards are software agnostic, solution providers can adopt these standards into their current technology framework. This means there is no need to purchase new barcode printing or transport management software to create and scan the freight labels across the supply chain.

Additionally, GS1 provides guidelines, training, professional services and barcode testing to help companies implement the standards. This could be anyone from shippers to logistics service providers and solution providers. Michiel says it's high time for the supply chain to come together and implement this global standard.

"As humans," he says, "we define and speak a common language



within the society we live to simplify communication and ensure our message is understood and not lost in translation. Similarly, in order to effectively digitise, industry needs to agree on which language

computer systems are going to use to exchange information across the supply chain." ■

For more information, visit www.gs1au.org/s4t-guideline