

# Simplified Trade System (STS)

## GS1 Australia Consultation Paper Response



“Tell us once” and “global data standards” are synonymous and foundational for efficient and effective international trade systems and regulatory processes. Simply put, much duplication and repetition is attributed to different regulatory agencies requesting the same information from industry in different ways. From a trade perspective, this is exacerbated when industries and/or countries use their own data formats, syntax, or semantics.

This submission focus on foundational methods (for identifying, capturing and sharing information) and the use of global data standards, including ISO/IEC norms relating to machine-readable codes to enable high levels of digital automation and efficiency. A technology-agnostic national approach is adopted to modernise regulatory systems in ways that positively impact all sectors of the economy through enhanced interoperability of government systems and processes.

Impediments to the adoption of technology is one of the questions raised by STS. Digital technologies are vital; however, the focus of reform and modernisation needs to be process and standards first and then technical solutions. As noted in GS1 Submission to the Australian Productivity Commission on supply chain vulnerabilities, April 2021<sup>1</sup>, industry has made clear (via our member consultations including advisory groups like NGTAG, special interest and working groups), that a lack of data standards and processes for information capture and exchange is the issue – not the availability of technologies like blockchain or machine learning.

Over the last decade, APEC and others have consistently reported on regional trade chokepoints and recommended actions to address them. Use of global data standards has been a critical recommendation addressing the root cause of a number of chokepoints analysed.<sup>3</sup> At the same time, the World Bank has benchmarked (refer Ease of Doing Business Report 2020<sup>4</sup>) cross border trade costs and effort through time and motion studies and related analysis. Australia has continuously ranked very poorly by comparison with comparable states and trade partners.

The submission mentions and brings to the attention of the STS Taskforce, several key reference documents, as noted below

- UN/CEFACT - BUY – SHIP – PAY Reference Data Model (Aug 2019)  
[https://unece.org/fileadmin/DAM/cefact/brs/BuyShipPay\\_BRS\\_v1.0.pdf](https://unece.org/fileadmin/DAM/cefact/brs/BuyShipPay_BRS_v1.0.pdf)
- APEC Guidelines and Best Practices for the Adoption of Global Data Standards Study on the Application of Global Data Standards for APEC Supply Chain Connectivity (Mar 2020)  
<https://www.apec.org/Publications/2020/03/APEC-Guidelines-and-Best-Practices-for-the-Adoption-of-Global-Data-Standards>

The submission is also informed by recently APEC reports and case studies involving the Australian red meat and wine trade to USA and Singapore (between 2017-2020).

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<sup>1</sup> [https://www.pc.gov.au/data/assets/pdf\\_file/0011/275492/sub008-supply-chains.pdf](https://www.pc.gov.au/data/assets/pdf_file/0011/275492/sub008-supply-chains.pdf)

<sup>3</sup> [https://www.apec.org/meeting-papers/annual-ministerial-meetings/2014/2014\\_amm/annexa](https://www.apec.org/meeting-papers/annual-ministerial-meetings/2014/2014_amm/annexa)

<sup>4</sup> <https://www.doingbusiness.org/en/reports/global-reports/doing-business-2020>

- APEC A Decade of Supply Chain Initiatives: Opportunities and Challenges in Post-COVID-19 Recovery (Feb 2022) <https://www.apec.org/publications/2022/01/a-decade-of-supply-chain-initiatives-opportunities-and-challenges-in-post-covid-19-recovery>
- Study on the Application of Global Data Standards for APEC Supply Chain Connectivity (2017) <https://www.apec.org/publications/2017/02/study-on-the-application-of-global-data-standards-for-apec-supply-chain-connectivity-phase-1>

Other useful reports of high relevance and likely interest to the STS Taskforce include:

- WTO guidelines for the establishment of national trade facilitation bodies (2021) <http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/national-committee-on-trade-facilitation.aspx>
- UN/CEFACT discussion paper encouraging greater public and private sector participation in national trade facilitation bodies <https://uncefact.unece.org/display/uncefactpublicreview/Public+Review%3A+White+Paper+on+Encouraging+Private+Sector+Participation+in+National+Trade+Facilitation+Bodies>
- ICC global data standards maps and discussion papers [due for release in Feb/Mar 2022](#)

Technical readers wanting to understand more about GS1 and UN/CEFACT standards and how they are used by government and industry may want to read or bookmark

- GS1 standards architecture document <https://www.gs1.org/standards/gs1-system-architecture-document/current-standard#1-Introduction>
- UNCEFACT online resources <https://unece.org/trade/uncefact>

One of the key messages in our submission is that the pilots, the value chain mapping, and case studies have been done. There is a need to address interoperability of government and industry information systems through regulatory reform not pilots. Economic costs and benefits to government and industry have been extensively reported<sup>5</sup>. The Australian Government is a signatory to APEC and its recommendations regarding actions required to address trade chokepoints.

## Recommendations

The submission makes three recommendations. The recommendations drawn on related GS1 submissions and feedback to Australian authorities over the past 18 mths, including the Productivity Commission, Supply Chain Resilience Task Force, DAWE Biosecurity Improvement Program and Australian Border Force Trade Sandpit Concept Initiatives.

The submission is also informed by numerous GS1 interactions with DFAT and Austrade, ABF/HA, ATO, ACCC, IP Australia, the Department of Infrastructure, Industry and various cross-agency industry briefings conducted as recently as October 2021.

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<sup>5</sup> <https://www.apec.org/publications/2017/02/study-on-the-application-of-global-data-standards-for-apec-supply-chain-connectivity-phase-1>

No	Recommendation (.. that)	Examples
1	<p>government align trade systems with natural business processes – what industry already does.</p> <p>Specifically, that government use ISO/IEC standards-based product, entity, location and other identifiers and messaging protocols (UN/CEFACT and other) that industries already use.</p> <p>There is opportunity to remove complexity, improve international systems interoperability, enhance national conformity/safety/quality systems - avoiding duplication and reducing cost for industry and governments.</p>	<p>Government use industry conventions and norms (eg. for product identification and classification) for reporting and compliance processes.</p> <p>Eg. automate HS Code classification using GTIN (barcode numbers) to avoid/reduce agency costs and speed up trade processes</p> <p>Eg. use national and global GS1 registries (products, locations, economic operators/entities) to enable pre-clearance and improve border inspection processes</p>
2	<p>government use of standards-based identifiers and symbology (data embedded-machine readable codes) as defined by ISO/IEC for documents, certifications and credentials exchange.</p> <p>Specifically, as outlined in recent report released by NATA/JAS-ANZ (Dec 2021) and with a focus on quality, safety and the exchange of conformity certificates.</p> <p>Government plays a critical role setting the pace and direction of digitalisation of forms and documents (G2G and B2G).</p>	<p>Market failures are likely without some leadership involving governments adoption of a national framework for the use of data carriers (on products, paper and pdf) and methods for trade credentials exchange.</p> <p>Eg. use of ISO/IEC standard syntax for the structured exchange – rather than each industry or sector developing their own methods.</p> <p>Refer examples given in the NATA/JAS-ANZ report.</p>
3	<p>Government action recommendations as outlined by APEC and others to streamline regulatory processes and impediments to more effective cross border trade.</p> <p>There have been enough case studies and pilots to prove business benefits. There needs to be a focus on bilateral sandboxes and new digital trade channels with strategic trade partners and industries for impact.</p> <p>This recommendation will be enhanced by STS and others leveraging existing trade facilitations systems and processes (National Committee for Trade Facilitation) and with WCO along with UNCEFACT, as opposed to technology-centric experiments and pilots.</p>	<p>Costs and benefits to trading partners and industry have been well defined in APEC reports and numerous international case studies.</p> <p>Practical measures to action recommendations endorsed by the Australian government include:</p> <p>Leveraging national location and other registers including Dept Infrastructure supported national freight hub</p> <p>Use of scan for transport and related freight/consignment labelling – to improve national (and global) freight systems</p> <p>Making use of GTIN and other product identifiers in trade documents and declarations (as NZ has done for example)</p>

## General Response

### **Tell us about your business, sector, product or service and location/s.**

GS1 is an international industry-led supply chain standards-setting body. It represents millions of global businesses that use ISO/IEC norms to identify, capture and share information about goods that move through global supply chains. Best known for the almost ubiquitous barcode use in retail trade, GS1 works through a federation of 115 international member organisations to support simple, efficient, safe and fair trade.

GS1 in Australia has over 21,000 business members from over 21 sectors. Its membership includes large international businesses, smaller enterprises and governments that seek to align trade processes using global data standards, including unambiguously unique global identifiers for retail products (barcodes) and logistics units (cartons, pallets, shipments etc) and related entities not limited to business identity, locations (for logistics communicating etc), assets (including returnable items), documents (incl. eCertificates) and much more.

In addition to standards for identification, capturing and sharing data, GS1 works closely with industry associations, governments and international trade facilitation agencies like UNCEFACT, WTO and WCO to align trade systems through standardisation, harmonisation and digitalisation. GS1 maintains semantic libraries and related information architecture to facilitate trade messaging and information exchange. All GS1 standards are open and royalty-free to use.

GS1 commends the Australian Government for its efforts to simplify trade systems and is pleased to provide input and support if and as appropriate. Education and awareness of existing trade facilitation processes and industry adopted standards (GS1 standards are ISO/IEC based) is a key service provided by GS1 to its members and the broader community of interest, including state and federal government agencies.

### **What is your role in the end-to-end trade environment (importer, exporter, customs broker etc)?**

GS1 Australia and globally provides soft infrastructure (or infostructure) in the form of standards-based information architecture to enable effective trade. This is achieved by developing (with and for its industry members) standards for the identification, capture, sharing and use of supply chain data. Generally speaking, governments have limited knowledge or understanding of the extensive master datasets maintained in Australia and internationally that support efficient and effective trade. As defined in GS1 Australia submission to the Australian Productivity Commission in 2021, there is an enormous opportunity for governments to 'tap into' a superhighway of high quality data to enhance public policy outcomes. Adoption of GS1 standards by industry is extensive – especially by mature organisations focused on global markets.

A simple example of the pervasive nature of GS1 key (identifiers and messaging standards) is provided below.

For example:

- An Australian winemaker uses unique product identifiers (GS1 barcodes) on wine bottles to make it easier for supply chain partners to engage in business – ie. ordering, stock management and on-shelf pricing etc.

- The wine producer may also use GS1 location and entity identifiers to manage production (what vineyard did the grapes come from), batching and vintages or tracing product flow to specific production lines and facilities.
- GS1 product, location and entity identifiers are increasingly used for trade clearance processes and to manage customs and taxation processes.
- Marketplaces, including eCommerce service providers are major advocates and users of global data standards to provide enhanced customer experiences<sup>6</sup> and for consumer engagement.

Rapid capture of data, embedded in GS1 identifiers, revolutionised the way business worked almost 50 years ago. A second transformation is now in progress with global enterprises embracing 2D codes carrying GS1 semantics and structured data packets.

Australian wine is increasingly being presented to end-users with rich data enhancing the product value and attractiveness to specific consumer groups – including details of production systems, management practices and other credentials of relevance to the end-user.

GS1 plays a trade facilitation role through the information architecture and standards that its members commit to and create via a structured global standards development process.

The Australian red meat export messaging system is an excellent example (discussed elsewhere) of how GS1 standards are used by industry and government to simplify trade processes.

Simplifying trade systems is at the heart of what GS1 is and does

### **What are the major pain points for your business to get your product to, from and across the border?**

Friction and chokepoints have been extensively documented by regional and international trade bodies not limited to APEC, ADB and the World Bank. Cost and time are the two key factors concerning Australian traders (exporters and importers). Australia's poor relative performance in cross border trade is well documented by the World Bank Ease of Doing Business Report (2020) with Australia ranking.<sup>7</sup> Australia ranks 106 on Trading Across Borders. The biggest hurdles are cost to export: border procedures; and cost to import: border procedures.

Extensive industry surveys conducted by APEC (2016-2017) identified 5 key choke points as noted below with items of direct/greatest relevance to the STS Taskforce discussion paper highlighted in italics

*(1) lack of coordinated border management, and underdeveloped border clearance and procedures;*

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<sup>6</sup> [https://developers.google.com/search/blog/2021/02/product-information?hl=en&utm\\_campaign=PostBeyond&utm\\_source=LinkedIn&utm\\_medium=%23346702&utm\\_term=Providing%20better%20product%20information%20for%20shoppers](https://developers.google.com/search/blog/2021/02/product-information?hl=en&utm_campaign=PostBeyond&utm_source=LinkedIn&utm_medium=%23346702&utm_term=Providing%20better%20product%20information%20for%20shoppers)

<sup>7</sup> World Bank Doing Business 2020 version is the latest  
<https://www.doingbusiness.org/en/data/exploreeconomies/australia>

- (2) inadequate quality of, and lack of access to, transportation infrastructure and services;
- (3) unreliable logistics services and high logistical costs;
- (4) *limited regulatory cooperation and best practices; and*
- (5) underdeveloped policy and regulatory infrastructure for e-commerce.

Resulting APEC recommendations and actions including a commitment to employ global data standards for trade have been ratified and are supported by the ABAC. More recently (January 2022) the chokepoint analysis has updated in 'A Decade of Supply Chain Initiatives: Opportunities and Challenges in Post-Covid 19 Recovery'<sup>8</sup> and an additional three chokepoints have been added as below (again with key points for this submission highlighted)

- 1) *Transparency: Lack of transparency/awareness of the full scope of regulatory issues affecting logistics; lack of awareness and coordination among government agencies on policies affecting the logistics sector; absence of a single contact point or champion agency on logistics matters.*
- 2) Infrastructure: Inefficient or inadequate transport infrastructure; lack of cross-border physical linkages such as roads and bridges.
- 3) Logistics capacity: Lack of capacity among local/regional logistics sub-providers.
- 4) *Clearance: Inefficient clearance of goods at the border; lack of coordination among border agencies, especially relating to clearance of regulated goods 'at the border'.*
- 5) *Documentation: Burdensome procedures for customs documentation and other procedures (including for preferential trade).*
- 6) Multimodal connectivity: Underdeveloped multimodal transport capabilities; inefficient air, land and multimodal connectivity.
- 7) *Regulations and standards: Variations in cross-border standards and regulations for movements of goods, services and business travellers.*
- 8) Transit: Lack of regional cross-border customs transit arrangements.

The WCO and others have responded to these and other reports with recommendations<sup>9</sup> including the establishment of national committees for trade facilitation. Australia established a National Committee for Trade Facilitation<sup>10</sup> in 2021 to coordinate cross-agency planning.

Covid-19 has focused government and industry on collaboration and streamlined trade processes. To support international alignment and action UN/CEFACT has recently released (December 2021) a discussion paper exploring how the public and private sector can work together more effectively to address chokepoints<sup>12</sup>. The International Chamber of Commerce has also recently launched a

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<sup>8</sup> <https://www.apec.org/publications/2022/01/a-decade-of-supply-chain-initiatives-opportunities-and-challenges-in-post-covid-19-recovery>

<sup>9</sup> <http://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/tools/national-committee-on-trade-facilitation.aspx>

<sup>10</sup> <https://www.directory.gov.au/portfolios/home-affairs/department-home-affairs/national-committee-trade-facilitation>

<sup>12</sup> <https://uncefact.unece.org/display/uncefactpublicreview/Public+Review%3A+White+Paper+on+Encouraging+Private+Sector+Participation+in+National+Trade+Facilitation+Bodies>

digital trade initiative<sup>13</sup> designed to accelerate the modernisation and simplification of trade processes.

### **Where and how do you believe the cross-border trade system can be simplified?**

At a very practical level, exporters and importers have to contend with regulatory processes that are not well aligned with what industry does. Simple examples of this include

1. Product identification and classification of traded goods
2. Business/entity identification and locations
3. Declarations, certificates and related credentials
4. Trade messaging – electronic data exchange

#### *Product identification and classification*

Businesses identify products in different ways and there are many industry-specific product classification systems. This creates complexity and adds cost to commercial processes. There is advantage in harmonising and standardising identification and classification processes as a foundational simplifier for trade.

Classification systems are not the same as identification systems. Effective product identification systems can, however support multiple product classification systems. The WCO Harmonised Code Systems (HS) for example, is critical for managing trade agreements and for trade reporting across different types of products. The HS classification system is not especially helpful for targeting risk management or to manage tax collection on high-volume/low-value trade items (online shopping etc).

Australian traders are increasingly required to maintain multiple product classification systems depending on the industry they serve and the countries where they trade. Exporters and importers that use GS1 identifiers on products and logistic units (cartons, packs, pallets and containers etc) are required to separately classify goods in accordance with the WCO HS Codification system.

Traders incur costs for goods to be classified for the purpose of calculating taxes payable. This administrative process is critical for governments (revenue to cover border control costs etc) however it is often seen as an impost given product often already carry specific trade item identifiers.

Several countries have moved to create concordance between GTIN/GPC and HS Codes to streamline and reduce the cost of trade processes. Vietnam and New Zealand for example derive HS codes from GS1 Global Trade Item Numbers (GTIN) and other GS1 trade item or logistical unit identifiers.

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<sup>13</sup> <https://www.dsi.iccwbo.org/>



Many countries are also making GTIN declaration mandatory (or voluntary) to support enhanced customs clearance and to improve revenue collection – especially for high volume/low value eCommerce trade.

### *Business/entity identification and locations*

In late 2019, the Chinese Government made it a requirement for all exporters of seafood to identify fishing vessels of origin. This highly disruptive regulation provides a simple example of how trade and market access requirements can become an obstacle for businesses.

Enhanced traceability (a major focus for DAWE and others to address biosecurity risks and to protect Australian brands in global markets) requires more than product identification. Location and economic agents together with virtual locations (server IP addresses etc) are increasingly in focus for regulators. Identifying companies involved in trade is critical to effective border control, tax collection and risk management.

GS1 in Australia is presently engaged with US Customs and Border Protection and a growing number of participating nation-states to use GS1 Global Location Numbers (GLN) along with Data Universal Numbering System (DUNS) and Legal Entity Identifiers (LEI) to make global business identification more transparent<sup>14</sup>. Use of GS1 GLNs key by trading partners (including for electronic messaging) makes it a compelling tool to achieve operational and regulatory efficiency.

Know your customer and country of origin reporting requirements are increasingly driving higher levels of transparency and complexity in trade processes. Australian business numbers and company identifiers used by the ATO and other agencies for internal revenue and related processes are of limited relevance for global trade. There is enormous value and advantage in aligning systems that enable the identification of businesses, business units, the locations they own and operate together with virtual locations they might use for say, hosting servers or for sending and receiving messages or payments.

Note: GS1 dealings with ATO and others have never been about changing the way ABN or other government embedded systems work in Australia. Rather, discussions over the years have focused on the harmonisation of systems to enable more effective cross border trade . The driver for this integration is improved data flow and transparency. Practical examples of global data standards at work here include public sector e.invoicing based on PEPPOL (Pan European Public Procurement On-Line) . Australia has adopted the Peppol framework as the common standard for eInvoicing. Many of Australia’s key trading partners have mandated the use of GS1 Standards and PEPPOL as part of their eProcurement Strategies<sup>15</sup>.

New Zealand is one of a few countries that use GS1 Global Location Numbers (GLN) to identify businesses. Every New Zealand business is issued GLNs via the New Zealand Business Register. This reduces complexity for many businesses that already use GS1 keys for say, product

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<sup>14</sup> <https://www.cbp.gov/sites/default/files/assets/documents/2021-Jul/Global%20Business%20Identifier%20%28GBI%29%20Slick%20Sheet.pdf>

<sup>15</sup> <https://www.gs1uk.org/insights/news/what-is-peppol>



identification. At a more strategic level, New Zealand exporting (and importing businesses) also have the ability to integrate their GLN data in trade messages.

Because GS1 keys are globally unique, New Zealand businesses may encode entity details, addresses and other information (eg. . ship-to location, pay to location or manufactured at) into messages and on-consignment symbology for rapid scanning. This has potential to improve operational efficiency and improve business competitiveness.

Australia has simplified some aspects of business registration and reporting (eg. state-based business names) however, there is much more that can be done to simplify entity and location data exchange to simplify trade processes.

The Australian government is in a strong position to leverage its investment in national locations master data (see the Department of Infrastructure's National Locations Registry<sup>16</sup>) to deliver operational efficiency in freight logistics, healthcare and primary production (for plant-based industries).

### **Recommendation 1**

That government align trade systems with natural business processes – what industry already does. Eg. automate HS Code classification using GTIN (barcode numbers) to avoid/reduce agency costs and speed up trade processes

We recommend that government use ISO/IEC standards-based product, entity, location and other identifiers and messaging protocols (UN/CEFACT and other) to reduced duplication, minimise agency costs, remove complexity, improve international systems interoperability, enhance national conformity/safety/quality systems.

#### *Declarations, certificates and related credentials*

International markets have increasingly opened through free trade agreements; however, technical trade barriers and other non-tariff barriers have increased, along with the trafficking of falsified or sub-standard goods. Traditionally, product conformity systems have been heavily reliant on trust and the exchange of manual documents and electronic (mostly PDF) certificates.

Current systems for managing declarations, conformity claims and exchange of credentials need modernisation. Trade documents can be fraudulently altered. Even legitimate documents can be misused. A test certificate, for example, generally pertains either to the sample as received or to a batch/shipment; however, it can often be in the interests of suppliers to spuriously infer that the test certificate applies to the ongoing supply of the product (or even to a related, but different product).

The best solutions and technologies for cross border credentials exchange will be worthless without effective national product conformity and credentialing infrastructure based on a common

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<sup>16</sup> <https://datahub.freightaustralia.gov.au/projects/location-registry/>

framework. Interoperable and standards-based digital systems are required to support the exchange of credentials that will drive national competitiveness and future market access.

Solutions developed by one agency of industry to address their context-specific concerns have, and will continue to perpetuate, a patchwork of incompatible systems. Efforts to coordinate information exchange between states and territories and from thousands of certifiers, testing and inspection authorities (within Australia alone) are at risk of becoming chaotic and potentially intractable, ultimately impacting trade competitiveness.

Together with the National Association of Testing Authorities (NATA) and JAS-ANZ, who oversee 50+ national quality and safety schemes, GS1 Australia has helped map out a framework to enable the digitalisation of national product conformity systems on ISO/IEC standards. The framework provides a roadmap and proposes a process to simplify the way product testing and certification is managed, using digital authentication and tracking of certificates to improve national productivity and Australia's international competitiveness.

Government initiatives to simplify and standardise trade document flow like NEXDOC provide an example of what is to come. Without a national framework, it is easily imaginable that the existing mosaic of systems and methods will proliferate (e.g. proprietary QR or other codes on paper or PDF documents), each using different semantics and pointing users to different data sources, such that conformity attestation becomes complex, costly, incompatible or impossible.

The NATA/JAS-ANZ/GS1 report is available at <https://nata.com.au/supplychain/>

## **Recommendation 2**

That government embrace a national framework to manage declarations, certifications and credentials exchange based on standards-based identifiers and symbology (data embedded-machine readable codes) as defined by ISO/IEC for trade documents, certifications and credentials exchange.

Specifically, as outlined in recent report released by NATA/JAS-ANZ (Dec 2021) and with a focus on quality, safety and the exchange of conformity certificates.

### *Trade messaging and electronic data exchange*

Electronic messaging has provided a backbone for dramatic industry growth and modernisation over recent decades. Mainframe systems remain in place with legacy infrastructure and deeply embedded systems. Middleware and APIs have provided mechanisms to connect the old with the new (or old) however, there have been limited attempts, up until recently, to address global data standards for trade.

Simplification, harmonisation, and standardisation of trade processes require the global alignment of multiple parties. UN/CEFACT and WCO's work on intergovernmental data exchange is enhanced and supported by the adoption of global data standards across most industries. This reflects the far-reaching application of such standards for global and domestic trade.

The Australian Government and other APEC Members have recognised that trade systems not based on global data standards create inefficiency that is contributing to market failures and supply chain vulnerability.

APEC Leader's Declaration & Global Data Standards Programme notes:

- APEC Leaders and Trade Ministers have recognised that a wider use of Global Data Standards can improve supply chain performance.
- Adopt Global Data Standards to ensure that relevant information is provided in a common format which is easily understood and sharable by all parties
- As transactions by governments and the private sector become increasingly electronic, it is more important and useful to ensure that systems used by stakeholders are interoperable

Much work has been done over the past few decades to facilitate effective global trade. There is a real risk that this work, tools and extensive resources will be lost or their value diminished through a lack of awareness and understanding of how to access and leverage data models and libraries. This risk is amplified by time pressure to deliver new systems with teams of limited tenure.

We must build on what we have and avoid duplicating foundational components as part of a quest to simplify things. Business Analysts, Technical Experts and Advisors guiding the STS Taskforce are encouraged to not only access but become expert at:

- UN/CEFACT - BUY – SHIP – PAY Reference Data Model (Aug 2019)  
[https://unece.org/fileadmin/DAM/cefact/brs/BuyShipPay\\_BRS\\_v1.0.pdf](https://unece.org/fileadmin/DAM/cefact/brs/BuyShipPay_BRS_v1.0.pdf)
- UN/CEFACT Core Component Libraries  
<https://unece.org/trade/uncefact/unccl>
- WCO Data Models  
<http://www.wcoomd.org/DataModel>
- GS1 Standard and Core Business Vocabulary  
<https://www.gs1.org/standards/epcis/epcis-cbv/1-0>

The above (and more) are well aligned however the way this alignment operates and how businesses use GS1 standards through supply chains is not well understood by many government agencies.

For example, it is not well known (outside of industry) that product and location identifiers (with 500+ attributes) are embedded in trade messages and within physical data carriers (barcodes, RFID, QR Codes ect.). Once this is understood and combined with W3C/WWW protocols (see GS1 Digital Link<sup>17</sup> for example), Distributed Identity (DID) and Verifiable Credentials (with or without blockchain), then a world of possibility is exposed.

GS1 Australia is committed to provide navigation support to assist government and industry understand and apply global data standards as are many representatives of UN/CEFACT and other seminal trade facilitation agencies.

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<sup>17</sup> <https://www.gs1.org/standards/gs1-digital-link>

The STS Taskforce is strongly encouraged to review the ICC Digital Standards Initiative (Standards Roadmap Report) when it is released in Feb/March 2022

### **Recommendation 3**

That government action recommendations as outlined by APEC and others to streamline regulatory processes and impediments to more effective cross border trade.

This recommendation will be enhanced by STS and others leveraging existing trade facilitations systems and processes (National Committee for Trade Facilitation) and with WCO along with UNCEFACT, as opposed to technology-centric experiments and pilots.

### ***How can GS1 support the STS Taskforce?***

Building on Australian Government supported APEC impact analysis GS1 would be pleased to assist the Task Force and supporting agencies demonstrate the value of priority actions via bilateral or other sandpit activities – eg. in cooperation with trade partners and leveraging the GS1 ASEAN or other networks.

Sandbox proposals have previously been provided to ABF and DAWE (via biosecurity improvement programs) with suggestions that a focus be given to pharmaceuticals and healthcare along with major commodities where advanced systems are already in use – red meat and automotive (aftermarket).

### ***Priority impact areas for consideration/discussion***

Some high impact measures to simplify trade systems based on the use of global data standards include:

1. Voluntary (preferred) use of GTIN (product barcode) in import and export declarations
  - a. This is already being stipulated by some Australian trade partners including China and Russia
  - b. New Zealand Government has regulated the use of GTIN for import declarations to assist reduce the cost and complexity of tariff collection (via the automated resolution of HS Codes)
2. Automation of HS Codes classification based on GS1 global trade item numbers (GTIN) (barcodes etc)
3. Explore how the meat messaging system<sup>18</sup> can be used to enhance trade processes in other industries like horticulture
4. Standardisation of consignment labelling for eCommerce - in accordance with ISO/IEC standards (extensively being applied in Europe).
  - a. Applying scan-for transport<sup>19</sup> systems (GS1 standard for goods consignments using data embedded codes)

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<sup>18</sup> [https://meatmessaging.info/iots/menu1\\_1.asp](https://meatmessaging.info/iots/menu1_1.asp)

<sup>19</sup> <https://www.gs1au.org/scan4transport>

- b. Reducing the complexity for freight and logistics agents and streamlining supply chain processes
- 5. Digitalise, standardising and simplify national product conformity and credentialling infrastructure (NATA and JAS-ANZ) to improve the integrity of quality assurance and safety systems
  - a. Verifiable credentials exchange (open attestation or other) for government-to-government data exchange
  - b. Support for product conformity community (2000+ assessment bodies) to adopt a standard framework for product information management and exchange
- 6. Promote (support for) awareness and adoption of 2D codes by industry and a mechanism for data carriage and machine/data driven systems
  - a. Government use as the norm – applying ISO/IEC standards
  - b. Concerted effort to promote standards use – semantics and open systems

### **What are the anticipated benefits to industry and government**

Trade systems can be simplified (and improved) by government use of ISO/IEC based data standards applied by industry. Extending the 'tell us once' mantra to 'us' as everyone in industry and not just government is anticipated to deliver a broad range of direct and indirect benefits.

#### Benefits to industry

- Industry use of voluntary, consensus based and intentionally recognised systems to identify products, consignments and shipments, locations, documents etc. reduces the risk, cost and complexity of navigating industry or country specific regulations.
- Common data standards mean that data exchange is region, language and culturally independent – data may be represented in machine and human readable form using standard semantics providing efficient data capture and transfer across borders.
- Industry receive greater value and utility for systems already in use.

#### Benefits to government

- Governments (state and federal) can avoid or reduce the cost of maintaining duplicate systems to maintain information that is often already used by business and industry to trade effectively
- Interoperability of systems between states – eg. property identification for biosecurity purposes.
- Access to a 'superhighway of information' to help define and manage effective public policy - g. national product and other registers are available to support a diverse set of policy agenda – eg. waste stewardship or related circular economy initiatives

Use of industry adopted data systems and standards has an added advantage of a reduced compliance burden cost. Industry assumes the responsibility of compliance – if say, company information is not up to date then it potentially impacts the businesses through its day-to-day operations – eg. . its no longer just a regulatory requirement.

## Have you seen in other countries' current trade processes that you think could be implemented in Australia?

As per the table below

Economy	Data Type and Identification	Product Category	Agency	Status
Canada	Global Trade Item Number, Unique Device Identification	Consumer products, health products, medical devices, pharmaceuticals, blood products	Canada Border Services Agency; Health Canada	Implemented
China	Global Trade Item Number, and associated master data elements	All product categories that carry GTIN General Trade and e-Commerce trade	General Administration of Customs China	Implemented as of Aug 2019, selected mandatory categories as of Jan 2022
Russian Federation	GLN compulsory information in not available GLONASS geo coordinates should be entered  GTIN is an optional element that the applicant may enter	Consumer products, cosmetics etc.	Submitted to Rosaccreditation <i>Unified Register of Certificates of Conformity</i>	Russian Government Decree 936 2021 in force as of September 2021
New Zealand	GTIN for imported / exported products <i>if there are Product Identifiers, the identity type must be selected and the relevant identity number stated, where known</i>	Products carrying GTIN	New Zealand Customs	In force as of May 2021
USA	GLN; LEI; DUNS	Seafood, Toys, Alcoholic beverages, consumer goods,	US Customs and Border Protection	POC 2022 participation by <i>China, UK, Italy, France, Vietnam, Canada, Mexico, Australia, NZ</i>

### Contact - further information

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