GS1 Global Data Standards
Critical to the efficiency of Australia's freight movements

Submission

to the Inquiry into the
National Freight and Supply Chain Priorities
Discussion Paper – May 2017

August 2017

1. INTRODUCTION

GS1 Australia commends the Australian Federal Government on the inquiry into the development of Australia's first National Freight & Supply Chain strategy which will determine a range of priorities and reform opportunities to raise the productivity and efficiency of Australian supply chains.

End to end supply chain visibility has grown to be a key focus area for many supply chain participants, however the reality of today's supply chains is that this is largely non-existent. The constraints of manual, paper based processes and bespoke, proprietary systems that are difficult to integrate makes it virtually impossible.

The focus of this submission is to impress the urgency for the freight sector to recognise the need to adopt GS1 Global Data Standards (GDS) as key enablers to achieving end to end supply chain visibility, and unlock the visibility gaps it is currently hampered by.

The current cost burden to the Australian economy of not having efficient systems integration across multi-party supply chains is high. The most recent research report, *"Investigating the Potential Benefits of Enhanced End to End Supply Chain Visibility"* published by Austroads[1] suggests a productivity penalty in the Australian Transport & Logistics (T&L) sector due to the inability to integrate incompatible data formats to be an estimated $1.63 Billion.   In comparison, the report goes on to explain, the cost to integrate using GDS would be around $400 million; a nett benefit to the economy of around $1.2Billion.

The Australian T&L sector is highly fragmented with not a single operator owning the supply chain from end to end. This places high dependencies on downstream freight forwarders and contractors, most of whom are small-medium enterprises and in many cases, are not technologically equipped to provide the integration required to efficiently close the visibility gaps that currently exist.

Strong direction and leadership from Industry and Government alike will be required to mobilise and enable these critical players in adopting standards based technology to enable end to end supply chain visibility across the sector and realise the potential.

Successful industry adoptions have occurred in many industries and in all cases, strong collaboration and firm requirements were set, either commercial or regulatory, for example:

- Large retailers who hold high market shares have major influence and can easily drive change and do so on a regular basis;
- In healthcare, State and Territory Health Departments have built requirements in tender documents;
- Global marketplaces including Alibaba, Google, Amazon & eBay all mandate GS1 GDS in their supply chains

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[1] https://www.onlinepublications.austroads.com.au/items/AP-R538-17

- In rail, the major passenger operators have collaborated in a united call to action for the adoption of GS1 standards for parts and components by 1st January 2019. https://www.gs1au.org/uploadedFiles/Content/6.Resources/Documents(1)/Publications/ARA-GS1-call-to-action-parts-and-components-id-project.pdf

In Australia, some 17,500+ companies are already members of GS1, the majority are SME organisations who trade goods through retail and industrial supply chains; transactions, that in all cases incorporate a physical transport component in getting goods to where they need to be. Interestingly, of the 17,500 companies across over 20 sectors, only 100 are transport companies.   This highlights the disproportionately low use of GDS by the transport sector compared to its customers and is a key indicator as to why the industry is not as integrated as it could be.

2. OVERVIEW OF GS1

GS1 is a global not for profit, member based organisation that develops and maintains ISO certified supply chain standards. Our engagement with industry in driving best practice supply chain automation is best recognised by the retail point of sale barcodes that are applied to grocery and consumer goods items worldwide.

Since our early history in retail, many other sectors including major industries such as healthcare and defence have implemented and sought gains from the same principles; the freight industry has unfortunately lagged badly behind in this regard.

The GS1 standards offer a comprehensive, out of the box toolkit of enabling data structures, dictionaries, definitions and vocabularies that work to streamline system to system integration, independent of any specific technology platform. In essence, *"the Global Language of Business"*

Efficiency gains are typically realised by using unambiguous globally unique Identification codes along with the electronic data capture and data exchange of non-commercial data across the value chain thus effectively "connecting" a myriad of disparate systems.

3. BACKGROUND

GS1 Australia has been actively working with the transport and logistics industry for many years and has been successful in delivering an extensive body of work that demonstrates the business and economic value of adopting GDS as fundamental building blocks to achieving best practice processes as the industry moves towards increased automation. This work has resulted in:

- A range of industry pilots across domestic and international supply chains to demonstrate supply chain visibility and benefit;
- Independent reports that point to significant qualitative and quantitative outcomes;
  - APEC study on *"The Application of Global Data Standards for APEC Supply Chain Connectivity"(November2016)*
    http://publications.apec.org/publication-detail.php?pub_id=1811
  - Austroads research report… *"Investigating the Potential Benefits of Enhanced End to End Supply Chain Visibility" (March 2017)*
    https://www.onlinepublications.austroads.com.au/items/AP-R538-17
- The release in March 2016 of industry guidelines for the common identification of freight labelling and data exchange in the Australian Transport Industry

There has been a growing recognition among industry leaders that GDS are a fundamental requirement if Australia is to realise the stated benefits of end to end supply chain visibility and integration. A national approach of how to achieve implementation is required with recommendations that Industry and Government need to work together to meet the impending challenges ahead.

4. RECOMMENDATIONS

4.1. Direction – A clear position that GS1 Global Data Standards are required to achieve best practice outcomes in end to end supply chain integration. The Austroads report recommends that industry be initially self-regulated in the adoption of GDS and be given a window of five years. Whilst this would be an ideal outcome it is unlikely that, without policy intervention, critical mass adoption by industry would succeed in that timeframe.

4.2. Freight tracking Identification – Serialised and consistent freight tracking identification codes to be consistent with GDS guidelines; the use of SSCC (Serialised Shipment Container Code) should be adopted as the industry standard for uniquely identifying freight/transport units as per the Australian Freight Labelling guideline released at the ALC Forum in March 2016.[2]

The SSCC is a key component of the ISO certified GS1 standards toolkit and is well recognised, it:

- Is well embedded in many retail logistics unit identification; providing the opportunity for the transport operator(s) to leverage its use, in many cases however this does not occur, the freight is re-labelled to comply with proprietary transport systems, with this process often repeated at every handling point across the chain.

- was endorsed many years ago and is still considered a valid unique consignment reference (UCR) by World Customs Organisation

- has been endorsed by CEN (European Committee for Standardization www.cen.org) in the TS17073 standard for Postal Services – interfaces for cross-border parcels in Europe, an initiative borne from increased parcel volumes due to growth of online eCommerce activity.

It is already endorsed by Government Agencies in a range of supply chain scenarios, including the Australian Digital Health Agency e-Procurement Program, agreements between Department of Agriculture and Water Resources and the USDA Food Safety Inspection Service for Australian Boxed Beef Export to the US, amongst others.

4.3. Freight labelling – all freight items should carry consistent labelling formats as per the Australian Freight Labelling guideline released at the ALC Forum in March 2016, including the SSCC as the unique tracking identifier encoded in a compliant barcode to enable scanning at point of handling.

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[2] https://www.gs1au.org/resources/forms/request-to-access-australian-freight-labelling-guideline/

4.4. Leadership – Lead industry by example by including GDS requirements for transport and logistics services when allocating freight contracts in Government tender processes.

4.5. Adoption Plan – the creation of a national adoption plan will help industry know what to do and when to do it. It would provide a framework for addressing known challenges and can leverage the successes and learnings of other industries. Industry needs and wants direction – leaving this to industry alone requires consensus and it is unreasonable to expect this will happen given the highly fragmented nature of the transport industry.

Industry has however begun to adopt GDS in their freight and transport processes. The freight labelling and data standards guidelines are being downloaded from the GS1 website daily. We are seeing large shippers and transport operators leading the charge; they understand the benefits and in the short term will enjoy some domestic competitive advantage. However, the fragmented nature of the sector makes it less than ideal environment as the individual engagement process is time consuming; having a national adoption plan they can point to would help even those that want to implement today.

4.6. Government Assistance – Government to consider offering some incentives to SME organisations to support adoption of GDS in their technology applications; this should be made available to both shippers of goods and transport operators/carriers/service providers.

4.7. "Technology" vs "Data" – Establish a clear message that explicitly distinguishes "Technology" from "Data" so as to provide guidance to industry about data standards being the requirement, not the choice of technology within which the data will be used.

The word Technology conjures a very subjective topic of conversation; it can refer to mobility, eCommerce, Intelligent Transport Systems, Electronic Work Diaries, Drones, the Internet of Things, Blockchain, Train Control Systems, any manner of back office enterprise systems etc. – these are all technologies.

Technology though, cannot exist without Data and the quality, accuracy, consistency and timeliness of Data determines the effectiveness of the technology outcomes, ie. Rubbish in, rubbish out!

Data standards are independent of the technology choice so it would be prudent for the National Freight & Supply Chain Strategy to make this explicit distinction and provide guidance to industry that data standards such as a consistent format of an identification code for freight will have no competitive disadvantage to individual businesses but will aid highly competitive national outcomes in the more efficient movement of freight from origin to destination. The perception that data standards may somehow commoditise businesses is just that, a perception and one that, if not altered will continue to be an impediment and barrier to success.

5.   CONCLUSION

GS1 Australia is committed to working with Government to achieve these important productivity reforms. Our aim is to support industry to establish a solid foundation for enhanced automation that will drive supply chain efficiency outcomes for years to come.   We know that projected growth of freight volumes as our country grows will put pressure on existing infrastructure assets so the physical freight task must be executed as efficiently as possible so as not to add to this pressure. Any non-value-added process, waste or unnecessary duplication of manual handling effort must be eliminated as much as possible from our transport processes and this will largely depend on the accuracy and timeliness of the information systems that drive the operational activities in the sector.

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