



Asia-Pacific
Economic Cooperation

Advancing
Free Trade for Asia-Pacific
Prosperity

Study on the application of Global Data Standards for APEC Supply Chain Connectivity

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Overview



- The Global Data Standards (GDS) project is an initiative under SCAP Chokepoint 7 'Regulations and Standards' to harmonize cross-border standards
- Use of GDS can also help address other Chokepoints
- Adoption of GDS enables supply chain activity to be messaged between stakeholders in a **globally consistent language**.
- GDS is expected to benefit supply chain activity in the following ways:
 1. Efficiency
 2. Integrity
 3. Visibility
 4. Innovation

Pilot programs



- 2 pilots were conducted to test the utilisation of GDS in supply chain connectivity in APEC:
 1. **Wine: Australia → Hong Kong, China**
 2. **Boxed beef: Australia → USA**
- Main issue targeted was limited visibility in both pilots
- GDS helps provide real time visibility:
 - EPCIS Eztrack acts as message portal
 - Barcode labelling of freight
 - Transport instruction by EDI (Beef pilot)
 - Meat Messaging system (Beef pilot)

Methodology



- 3 specific tasks to capture cost and benefit data:
 1. Undertaking a Baseline Survey
 2. Establishing the key performance indicators (KPIs)
 3. Identifying impacts experienced in each supply chain
- APEC member economies were also invited to complete a survey on the adoption of GDS in their trade activities

Wine Pilot

(From Australia to Hong Kong, China)



Main Process:

1. Orders are received via email by the sales team from the customer then forwarded to the supplier.
2. Order is manually printed and coded based on Enterprise Resource Planning (ERP) system.
3. Product is transported into a consolidation centre operated by a 3rd party logistics (3PL) company.
4. Supplier uses electronic data interchange (EDI) interface with 3PL's warehouse management system to keep updated on the stocks.
5. 3PL organises all clearances and packaging for shipment.

Wine Pilot (AUS to HKC)

Benefits



1. Transport planning and visibility or earlier notification of transport schedules
2. Improved ability to identify trends for business.
3. Eliminate surplus inventory and avoid stock runouts by properly matching supply and demand.

Wine Pilot (AUS to HKC) Benefits



4. Delivery in full on-time (DIFOT) failures

Participant Affected	Additional time per occurrence (hours)	Cost per occurrence (\$US)
Supplier	4.00	230.00
3PL	2.50	143.00
Customer	10.50	273.00
TOTAL	17.00	646.00

Source: ISCL APEC GDS Pilot Baseline Survey, 2016.

Boxed Beef Pilot (From Australia to USA)



Main Process:

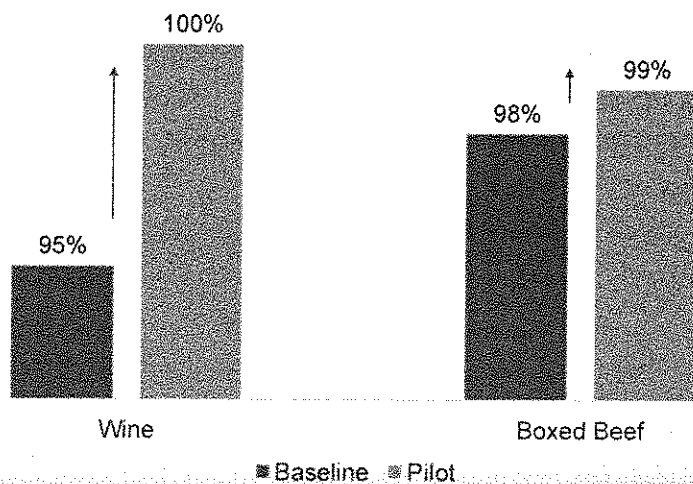
1. Full container loads are packed at the meat processing plant based on orders placed through EDI messaging.
2. Supplier manages freight forwarding internally, outsourcing wharf cartage to a transport firm, and booking with the shipping line.
3. On arrival at the port, the customer liases with the meat clearance center and organizes transport to 3PL cold storage and delivery.

Boxed Beef Pilot (AUS to USA) Benefits



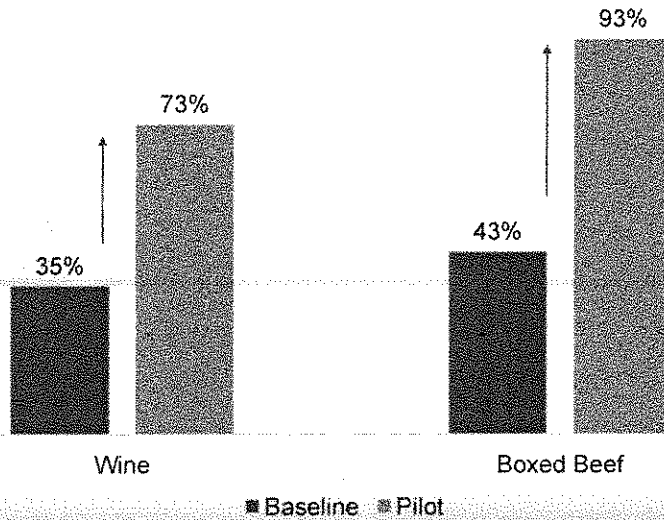
- Transport efficiencies: meeting customer needs and eliminating manual entry errors.
- Product Integrity: Additional customer care assurance.
- Container Demurrage and Detention: minimize costs through early notification of container availability at port and importer notification
- Compliance and Innovation: through the engagement in Australian Meat Messaging system

Benefits: Avoidance of DIFOT Failures



Source: VU ISCL, APEC GDS Pilots, 2016

Benefits: Traceability



Source: YU ISCL, APEC GDS Pilots, 2016

Costs



- Cost variables:
 - Preparation
 - Development
 - Implementation
 - Membership of standards body
- For SMEs:
 - One-off costs to achieve GDS-compliant messaging: minimum of **US\$11,000**
 - Recurrent costs: **US\$1,092 and \$12,325**
Depending on turnover, level of integration with enterprise resource programs; and the volume of messages.

Enablers and Challenges



Key Aspects: transport and logistics, and related communication along the supply chain.

Challenges: lack of visibility or poor traceability of goods

Addressed Chokepoints:

Chokepoint 1: Lack of transparency/awareness

Chokepoint 4: Inefficient clearance of goods at Customs

Chokepoint 5: Burdensome customs documentation and other procedures

Chokepoint 7: Variations in cross-border standards and regulations for movement of goods, services and business travellers.

Enablers and Challenges



1. Potential availability of industry system data to automate lodgment of trade data and to verify compliance.
2. Coordination of regulatory agencies
3. Trusted Trader/Program/Authorized Economic Operator Program
4. Cargo security
5. Potential Interface with port community systems

GDS Application for Border Clearance

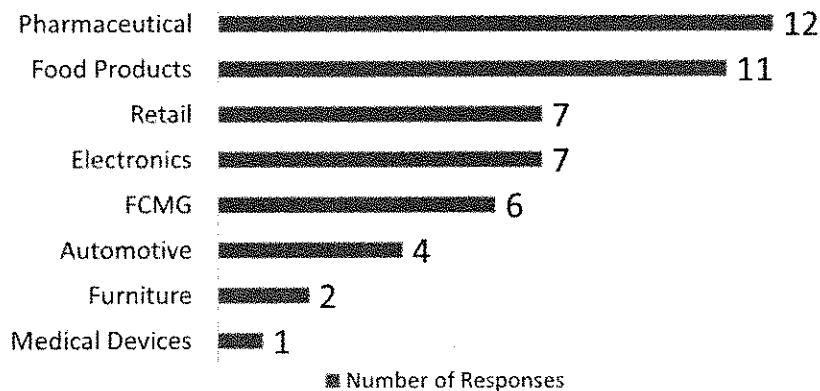


- Barrier: inability to leverage commercial system data for regulatory purposes.
- The lack of EDI-enabled interfaces with border and trade regulatory agencies.
- The regulator having access to the industry portals enabling visibility
- By having access to the raw data from a visibility platform, a regulator could reduce clearance times, burdensome documentation and enhance risk management.
- The potential for GDS to enable a streamlined clearance process depends on coordination between regulatory agencies and the ability of each agency to interface with not only the traders but with each other.
- The Integrated Import Declaration for the trade between Canada and the United States, based on the GTIN identifier for all products entering Canada.
- The New Zealand Single Trade Window is using GDS for its import trusted trader program, implementing the Joint Border Management System.

Impact on APEC Economies



Products and Sectors

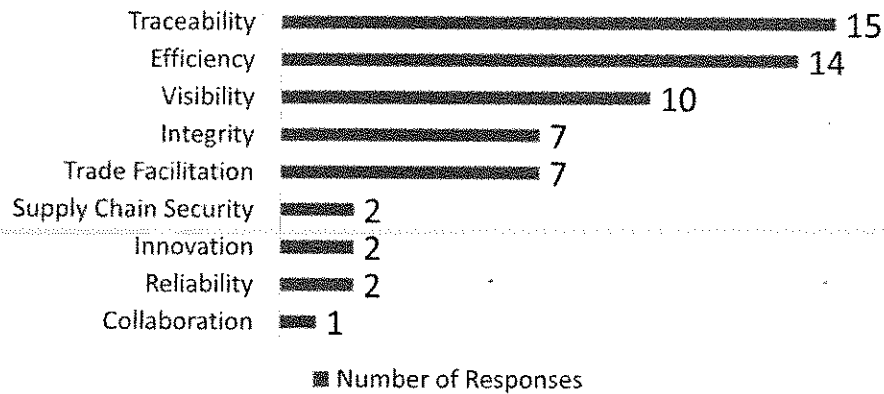


Source: APEC Policy Support Unit Global Data Standards Survey 2016.

Impact on APEC Economies



Key Potential Benefits

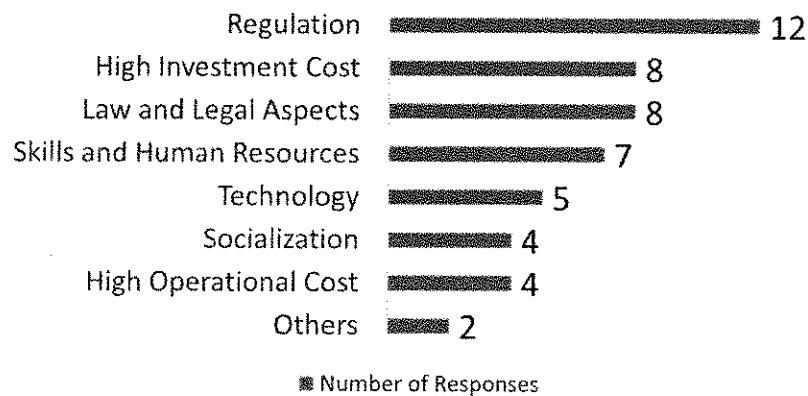


Source: APEC Policy Support Unit Global Data Standards Survey 2016.

Impact on APEC Economies



Key Challenges and Costs

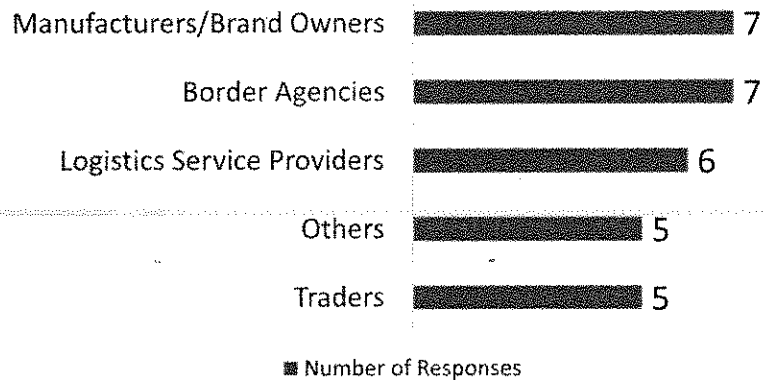


Source: APEC Policy Support Unit Global Data Standards Survey 2016.

Impact on APEC Economies



Stakeholders



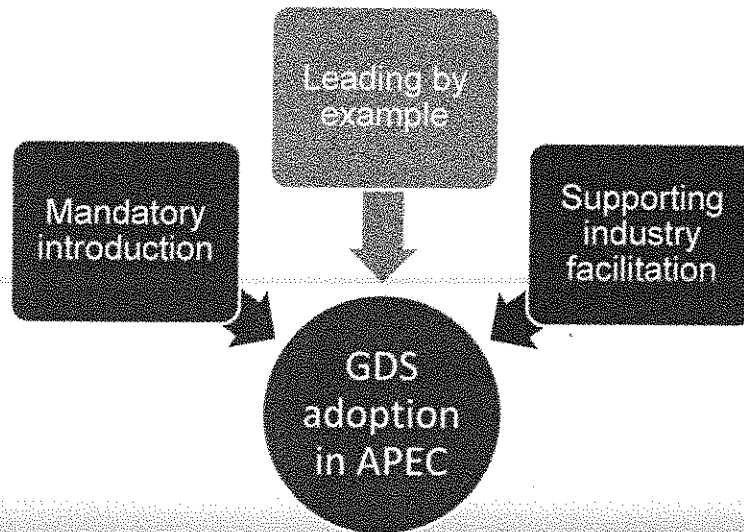
Source: APEC Policy Support Unit Global Data Standards Survey 2016.

Impact on APEC Economies: Key insights



- Wide variation in relation to the definition of GDS
- Adoption of GDS ranges from agricultural to retail products
- Importance of GDS in domestic and international trade.
- Main challenges for GDS implementation are regulation and high investment costs
- Efficiency, visibility, and traceability are the major potential benefits
- Manufacturers/brand owners, logistics service providers and border agencies are the key stakeholders who should facilitate the implementation.

Conclusion: Multi-pronged approach



Conclusion: Progressing GDS Adoption in APEC



Understanding the challenges and opportunities

Governments might consider two streams of activity in relation to the adoption of GDS to facilitate trade:

1. Supporting industry understanding and uptake by working with trade and logistics peak bodies and the standards-providers;
2. Conducting analysis on how GDS might be utilised in gathering data related to trade regulation activities.

Thank You



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