

APEC GDS Pilots 2015

亞太經合組織全球數據標準先導計劃 2015

Supply Chain Connectivity - Cornerstone to APEC's Trade Facilitation

供應鏈連接 - 促進亞太經合組織貿易基石

Project Overview

APEC (Asia Pacific Economic Cooperation) is looking to reduce transaction costs in trade facilitation and expand its work to cover other associated transport, communication and related constraints behind the border costs.

The APEC Supply-Chain Connectivity Framework reinforces the need for approaching supply chain connectivity and simplifying trade facilitation across APEC. In this context, improving trade logistics through enhanced supply chain connectivity has emerged as a significant factor contributing towards increased trade facilitation.

The Supply Chain Connectivity Framework has identified a number of chokepoints impeding the smooth flow of goods throughout the APEC region. It is anticipated that widespread use of Global Data Standard (GDS) in various supply chains in the APEC region will help overcome variations in cross-border standards and regulations for movement of goods.

項目概覽

亞太經合組織正研究如何減少貿易便利化中涉及的交易成本，並且擴大其工作範圍，以涵蓋邊境費用背後的其他有關運輸、通訊及相關限制問題。

亞太經合組織供應鏈互通框架加強了整個亞太經合組織的供應鏈互通性及簡化貿易便利化的需要。在這方面，通過加強供應鏈互通性以改善貿易物流，已成為促進貿易便利化的重要因素。

供應鏈互通框架認定了一些窒礙了為亞太經合組織地區貨運流通的阻塞點。預料全球數據標準(GDS)在亞太經合組織地區中各個供應鏈的廣泛使用，將有助於克服變化多端的跨境標準及貨物移動規則。



GS1 Standards used 應用的GS1標準

Global Location Number (GLN)
全球位置編碼

Global Trade Item Number (GTIN)
全球貿易貨品編碼

Serial Shipping Container Code (SSCC)
貨運容器序號

Global Individual Asset Identifier (GIAI)
全球個體資產識別碼

Global Shipment Identification
Number (GSIN)
全球貨運識別碼

Electronic Product Code Information
Services (EPCIS)
產品電子代碼訊息服務

Solution(s)/Service(s) applied 推行方案/服務

ezTRACK™
蹤橫網™



Challenge

Prior to the adoption of GDS, there was limited visibility in cross-border shipments and translocations with the following challenges:

- 1 A lack of transparency and awareness of regulatory issues** related to logistics, coupled with a lack of awareness and coordination among government agencies on related policies, as well as an absence of single contact point or champion agency on logistics matter
- 2 Inefficient clearance of goods at customs** and a lack of coordination among border agencies.
- 3 Cumbersome customs documentation and procedures** including those for preferential trade
- 4 Variations in cross-border standards and regulations** for the movement of goods, services and business travellers
- 5 A lack of regional cross-border customs-transit arrangements**

Solution

Two pilot projects were conducted in the following routes:

- 1 Wine exported from Australia and imported to Hong Kong, China;** and
- 2 Boxed beef exported from Australia and imported to the USA**

Wine

Commenced in October 2015 the product identification on wine pilot was utilized at the carton level, pallet level and finally to container level. Orders were received via email from the Hong Kong importer. The goods were transported through port of Adelaide, Australia to Hong Kong port via Singapore port.

In this pilot, the transport event messages were supplemented to the existing transactional data which enabled real time visibility to all stakeholders, using EPCIS integrated supply chain platform.

挑戰

在採用全球數據標準(GDS)之前，跨境運輸和搬移的透明度皆有限，面對的挑戰如下：

- 1 透明度和認知度不足：**主要就影響物流運作的監管程序而言。政府部門之間對於相關政策缺乏認知及協調外，亦沒有就物流事務設立單一聯絡點或主理部門
- 2 海關貨物清關效率低落，**邊境部門之間缺乏協調
- 3 海關文件及其他程序過於繁重：**包括實施優惠貿易的程序
- 4 跨境標準和法規未趨劃一：**窒礙貨品、服務及商務旅客的流動
- 5 欠缺區際跨境轉關的安排**



解決方案

亞太經合組織在以下兩條路線開展先導計劃：

- 1 從澳洲出口並進口到中國香港的葡萄酒；以及**
- 2 從澳洲出口並進口到美國的盒裝牛肉**

葡萄酒

於2015年10月開始，先導計劃將葡萄酒的產品辨識用於紙箱，再延伸到卡板和集裝箱。香港的入口商通過電郵接收訂單，貨物經澳洲阿德萊德港、新加坡港到達香港港口。

是次先導計劃中，運輸活動訊息補充了現有交易數據的資料，利用產品電子代碼訊息交融的供應鏈平台，令所有參與者都獲得實時的透明度。

第三方物流公司組織了所有貨物清關，包括與澳洲海關和邊境保護服務集成貨物系統的電子接口，以接收出口貨物獲批准的出口報關單號(EDN)。基於在新加坡港口進行船隻交換，計劃亦使用了全球貨運識別碼(GSIN)，以識別用於跟口和識別的集裝箱的裝運分組。

A 3rd party logistics (3PL) company organised all clearances for the shipment which included electronic interface with the Australian Customs and Border Protection Service Integrated Cargo System to receive a cleared Export Declaration Number (EDN) for the shipment. Due to the vessel swapping in Singapore port, GSIN was also added to identify the shipment grouping of the containers for tracking and identification.

Boxed beef

The supply chain pilot involved product from the meat processor in Queensland, Australia, transported through the Port of Brisbane to the Port of Philadelphia, USA via the transshipment in New Zealand. Boxed beef was packed at the meat processing plant based on orders placed through EDI (Electronic Data Interchange) messaging. On arrival at the Port of Philadelphia, the importer liaised with the meat clearance centre and organised the transportation to 3PL cold storage facility in New Jersey for grading, USDA/FSIS inspection and storage prior to distribution.

盒裝牛肉

供應鏈試驗也包括來自澳洲昆士蘭的肉類處理商，並經過布里斯班港，經新西蘭轉運到美國費城港。根據電子數據交換(EDI)信息，肉類處理工廠會為盒裝牛肉進行包裝。到達費城港時，進口商會與肉類清關中心聯絡，並安排運輸到新澤西的第三方物流設施，於分銷前進行等級分類，美國農業部(USDA)/食品安全及檢驗局(FSIS)檢核及存儲。



Benefits

1 Improved visibility

The supply chain visibility of wine and boxed beef were increased from 35% to 73% and from 43% to 93% respectively.

2 Enhanced efficiency

100% Delivered In-Full, On-time was achieved for wine project. The impact of missing or damaged ship marks was reduced for the boxed beef project.

3 Encouraged innovation

Supply chain information obtained from the visibility platform could facilitate government agencies to conduct risk management.

4 Promoted product integrity

Track and trace of products along the entire supply chain helped to guarantee product authenticity and manage product quality.

效益

1 改善透明度

葡萄酒及盒裝牛肉的供應鏈透明度分別由35%提升至73%及由43%提升至93%。

2 提升效率

葡萄酒計劃達成了100%的完全按時運送(DIFOT)。就盒裝牛肉計劃而言，亦減低了船舶標記丟失或損壞帶來的影響。

3 鼓勵革新

由追溯平台獲取的供應鏈資訊可促進政府機構進行風險管理。

4 推動產品完整性

整條供應鏈的追蹤追溯可幫助保障產品真確性和管理產品品質。

APEC GDS Pilots 2016

亞太經合組織全球數據標準先導計劃 2016

Global Data Standards Strengthen Supply Chain
Connectivity and Visibility
全球數據標準 加強供應鏈連繫及透明度

“ We welcome the progress made on a suite of Global Data Standards (GDS) pilot projects which will demonstrate how GDS can enhance supply chain performance.

我們歡迎在全球數據標準(GDS)先導計劃上取得的進展，顯示GDS能夠如何提升供應鏈的表現。”

“ We encourage officials to explore next steps for the wider use of GDS in the APEC region.

我們鼓勵官員為GDS在亞太經合組織地區的廣泛應用探討下一步措施。”

APEC Ministers Statement on Trade Facilitation - 18 May 2016

亞太經合組織部長對貿易便利的聲明 - 2016年5月18日



GS1 Standards used 應用的GS1標準

Global Location Number (GLN)
全球位置編碼

Global Trade Item Number (GTIN)
全球貿易貨品編碼

Serial Shipping Container Code (SSCC)
貨運容器序號

Global Individual Asset Identifier (GIAI)
全球個體資產識別碼

Global Shipment Identification
Number (GSIN)
全球貨運識別碼

Electronic Product Code Information
Services (EPCIS)
產品電子代碼訊息服務

Solution(s)/Service(s) applied 推行方案/服務

ezTRACK™
縱橫網™



Project Overview

Trade facilitation holds a pivotal role in the Asia-Pacific region. It promotes free trade and investment among the regions, increases trade opportunities, and also helps businesses to save time and operation cost, hence improving the business environment.

APEC ministers welcomed the progress made on a suite of Global Data Standards (GDS) pilot projects effected in 2015. Thus, a new round of pilot projects (2016 GDS Pilots) has been set to make further investigation of GDS effectiveness on selected international supply chains.

Challenge

APEC has identified an array of trade bottlenecks that continue to impede the smooth flow of goods, services and business travelers, including:

- 1 Lack of transparency and awareness** of the full scope of regulatory issues affecting logistics
- 2 Inefficient or inadequate transport infrastructure** due to lack of cross-border physical linkages
- 3 Lack of capacity of local/regional logistics sub-providers**
- 4 Inefficient clearance of goods at customs** and lack of coordination among border agencies
- 5 Cumbersome customs documentation and other procedures**
- 6 Variations in cross-border standards and regulations**

Solution

GS1 HK is appointed as the project manager of the 2016 GDS Pilots, and is responsible for the overall coordination with 6 different GS1 local offices for the project implementation in 6 economies. The following international supply chains are being executed in 2016, including:

1. Fresh and frozen durian exported from Malaysia, and imported to Hong Kong and China;
2. Fresh asparagus exported from Peru, and imported to the United States;
3. Tequila exported from Mexico, and imported to the United States.

項目概覽

貿易便利化於亞太區扮演著非常重要的角色，不但有助促進亞太地區之間之自由貿易及投資，增加貿易機會，亦可協助企業節省時間及營運成本，從而改善營商環境。

亞太經合組織部長歡迎2015年實施的一套全球數據標準(GDS)先導計劃及所取得的進展，因此，已設置新一輪先導計劃(2016 GDS先導計劃)，以進一步調查一些特選國際供應鏈的GDS效率。

挑戰

亞太經合組織列出的部分窒礙貨品、服務及商務旅客的流動的瓶頸，當中包括：

- 1 透明度和認知度不足：**主要就影響物流運作的監管程序而言
- 2 運輸基建不足或效率欠佳：**缺乏實體跨境連繫
- 3 本地及本區的物流次供應商能力不足**
- 4 海關貨物清關效率低落，**邊境部門之間缺乏協調
- 5 海關文件及其他程序過於繁重**
- 6 跨境標準和法規未趨劃一**

解決方案

GS1 HK擔任2016 GDS先導計劃經理，負責全面協調六個GS1本地辦事處，以便在六個經濟體實施這些計劃。2016年，我們正協助以下國際供應鏈，進行計劃，當中包括：

1. 新鮮和冷凍的榴蓮從馬來西亞出口，然後進口到香港和中國；
2. 新鮮蘆筍從秘魯出口，然後進口到美國；
3. 龍舌蘭酒從墨西哥出口，然後進口到美國。

GS1 provides the following solutions and services to support the 2016 GDS Pilots:

1 Process Consultancy & Capacity building

- Analyse data visibility, examine the existing risk management practice, collect data attributes and perform process mapping.
- Support streamlining and enhancement of current operations for better use of GDS.
- Provide capacity building trainings or workshops and prepare the training materials.
- Provide input on the design and methodology of survey questionnaires, assist local office project team to conduct survey, analyse captured data and prepare reports.

2 Global Traceability Standards & Solutions

GS1 implemented its ISO compliant EPCIS-based ezTRACK™ platform and data capturing tools to support the GDS projects. Trading partners, authorised third parties and government agencies can access the information from ezTRACK™ platform to assist decision making.

3 Risk Management System Study

GS1 works with the involved economies to examine the current risk management systems adopted in the customs and border agencies and advise on how the risk management systems could be improved through the use of GDS.

GS1提供以下的解決方案及服務，支持2016GDS先導計劃：

1 過程諮詢和能力提升

- 分析數據透明度、審查現有風險管理做法、收集數據特質和實施流程圖。
- 支持持份者精簡和加強目前的操作或過程，以更好地運用GDS。
- 為持份者提供能力提升培訓或講座和及預備培訓材料。
- 向亞太經合組織提供有關問卷調查的設計和方法、協助當地辦事處的計劃團隊發放、完成和收集調查問卷、分析收集到的數據並準備相關報告。

2 全球可追溯性標準及解決方案

GS1實施了針對ISO的產品電子代碼訊息服務(EPCIS)的縱橫網™平台、數據收集工具，以支持GDS計劃。貿易夥伴、獲授權的第三方和政府機構可以獲取縱橫網™平台上的資料，以協助決策。

3 風險管理系統研究

GS1與相關經濟體合作，在參與計劃的海關和邊境機構的試驗地點，檢查他們採用的風險管理系統，並提出適當的建議，協助他們透過使用GDS改善風險管理系統。



Targets and Benefits

Riding on the success of the 2015 GDS Pilots, it is expected that the 2016 GDS Pilots will enhance the supply chain efficiency and visibility, improve product integrity and create an innovative platform through 'smart' supply chain processes.

1 Demonstrate how GDS will enhance supply chain performance, consumer safety and contribute to better compliance and risk management.

2 Identify enablers, challenges, and mitigation policies through the pilot projects.

3 Encourage wider adoption of interoperable GDS to facilitate trade and to assist economies to implement their commitments under the WCO & FTA.

目標及效益

隨口2015 GDS先導計劃的成功，2016 GDS先導計劃預期能夠提升供應鏈效率及透明度、改善產品完整性及透過「智能」供應鏈程序造就了創新的平台。

1 展示GDS將如何提升供應鏈表現，消費者安全及其對更佳監察和風險管理的貢獻。

2 透過先導計劃，辨認促成因素，挑戰和緩解政策。

3 鼓勵更廣泛採用可互操作的GDS，以促進貿易，並協助各經濟體履行其在世界海關組織和自由貿易協定下的承諾。