

GS1 – The Global Language of Business

What does the future hold for today's Traceability Systems?

Denis O'Brien

Director of Standards & Solutions GS1 Ireland

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GS1 - Who are we?









E



Neutral

User Driven

Member organisation driving Global Standards

Not-for-Profit

Costs and savings shared by members

Global reach, Local Presence

- 112 Member Organisations
- 150 countries served
- 20 Industrial Sectors
- > 2,000 staff globally
- > 1.5 million member companies
- > 3,000 companies in Ireland
- > 40 Years experience
- > 6 billion transactions daily
- ISO, CEN, ETSI, UNECE based standards



Identify





Company & Location

• Global Location Number (GLN)

Product

- Global Trade Item Number (GTIN)
- Serialised Global Trade Item Number (SGTIN)

Logistics & Shipping

- Serial Shipping Container Code (SSCC)
- Global Shipment Identification Number (GSIN)
- Global Identification Number for Consignment (GINC)

Assets

- Global Individual Asset Identifier (GIAI)
- Global Returnable Asset Identifier (GRAI)

Services & More

- Global Service Relation Number (GSRN)
- Global Document Type Identifier (GDTI)
- Global Coupon Number (GCN)



Capture







Share



Master Data

GDSN

Global Data Synchronisation Network

The GDSN connects trading partners to the GS1 Global Registry® via GS1-certified Data Pools, enabling automated electronic sharing of standardised, up-to-date, accurate, product information.

What Goes Into It

- GTIN, GLN
- Brand Owner Identification
- Product Descriptions
- Global Product Classification (GPC)
- Target Market

Transactional Data

eCom

Electronic Communication

GS1 eCom standards provide clear guidelines for Electronic Data Interchange (EDI), enabling electronic sharing of accurate business transaction information between trading partners.

What Goes Into It

- GTIN, GLN, SSCC, GSIN, GINC, GDTI, GRAI, GIAI
- Purchase Order
- Despatch Advice
- Transport Instruction
- Invoice
- Payment

Event Data

EPCIS

Electronic Product Code Information Services

EPCIS is the standard for immediate sharing of information about critical events between trading partners. It provides evidence of what is occurring in the supply chain, and observations of the *what*, *when*, *where* and *why*.

What Goes Into It

What SGTIN
Where GLN
When SSCC
Why GIAI GRAI GSRN

GDTI





BIM administered a grant-aid programme to make funds available to industry . . .

This programme was called *e-LOCATE*



from Lots to Origin, the Control, Assurance and Traceability of EU seafood







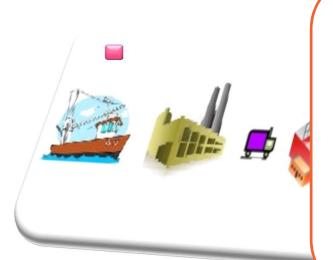








Challenge was Data Sharing



- Data to be shared must be;
 - Complete, Consistent, Accurate,
- Standardised & Timely *
- Data should be shared;
- Easily, Quickly, Reliably, & Cheaply
- Data Sharing Technologies;
- Barcodes
- EDI (Orders, Despatch Advice, Invoices)
- GDSN (Global Data Synchronisation Network)
- EPCIS (Electronic Product Code Info. System)

*Source: GCI/CapGemini Report: "Internal Data Alignment", May 2004





1.1 Vessel Name 1.2 Vessel ID 1.4 Producer ID IEA1B2C3D4 WS1234 MFV Dame Edna Area for producer or IE 1.3 Producer Name supplier supplier logo 1234 Traditional Fish Processors A/S and related information EC such as address, tel., etc. 1.6 Supplier Name 1.7 Supplier VAT No A Fishtrading A/S IE1234567X 2.1 Commercial Name 2.2 Product Id Prawns 11/15 Male - Irish Sea 1234 2.3 Species Code 2.4 Scientific Name 2.13 Ingredients Nephrops Norwegicus, Sodium Metabisulfite (E223) NEP Nephrops Norvegicus 2.6 Quality 2.5 Size 2.7 Presentation 2.8 Preservation 2.9 Freshness: 4-6 kg Superior Whole Froozen 2.11 Certification 2.10 Trim 2.12 Storage Temp.: 2.14 Allergens **AXY 123** -18°C Sulphites 3.1 Batch Number 3.2 Catch Date(s) 3.6 Production Method 99123456 01 - Caught At Sea 11-Jan-2018 14-Jan-2018 3.7 Fishing Gear 11.2 4.1 Quantity 3.3 Production Date Mechanised dredges including suction dredges 15-Jan-2018 3.8 Catch Area 27.7 3.4 Freeze Date Irish Sea, West of Ireland, Porcupine Bank, Eastern English Channel, Western English Channel, Bristol 15-Jan-2018 4.2 Net Weight: 12.340 kg Channel, Celtic Sea North, Celtic Sea South, South 3.5 Use By West of Ireland - East, Southwest of Ireland - West 15-Jan-2019

Area for additional text or linear or two-dimensional barcode(s), for other internal or customer information or product codes, etc....





Opened: 01-Nov-2013

Closed: 22-Nov-2013 (31-Mar-2014)

Target: High Volume

First Point of Sale

Applications Received: 13
Valid Applications: 8

Total Eligible Expenditure: € 1,181,950

Grant Aid: € 827,110

Opened: 05-Feb-2014 **Closed:** 21-Feb-2014

Target: Lower Volume
First Point of Sale

Applications Received: 24
Valid Applications: 8

Total Eligible Expenditure: € 2,015,862

Grant Aid: € 320.195

Planned Expenditure: £ 1,400,000

Grant Aid Funding: € 1,147,305

Project Manager/Admin: € 17,215

Technical/Training/Audits: € 167,020

Final Expenditure: € 1,331,540

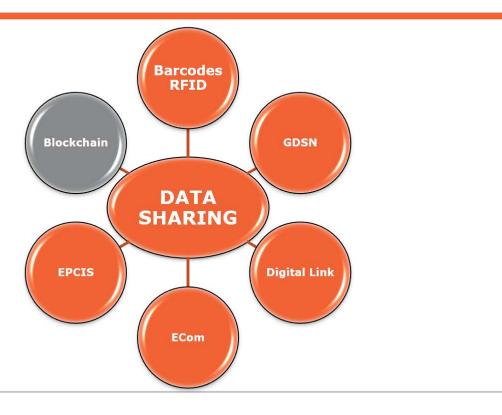
(€ 68,460)



IoT-based Traceability infrastructure

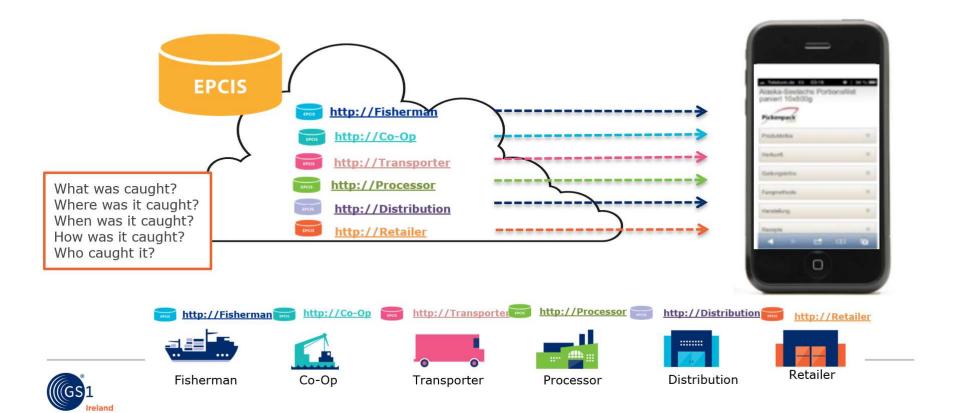


Traceability - How?





EPCIS – ultimate supply chain collaboration



Thank You



Denis O'Brien

Director of Standards & Solutions

Denis.OBrien@GS1IE.Org

