

# Case Study: Wild-Caught Protein for Aquaculture Shrimp



Enabling the conveyance of traceability data on aquaculture shrimp using Global Standards 1 (GS1)'s Electronic Product Code Information Services (EPCIS) XML schema.

## Use Case Tested

This pilot enabled the conveyance of traceability data on aquaculture shrimp, from feed manufacturing back to catch of wild-caught protein sources, through a large, multi-national, vertically integrated company.

## Challenges

Information and data were in Thai. External Traceability required using GS1 & Non-GS1 keys. Supply chain for fishmeal was quite long and data collection required coordinating across complex ownership structure.

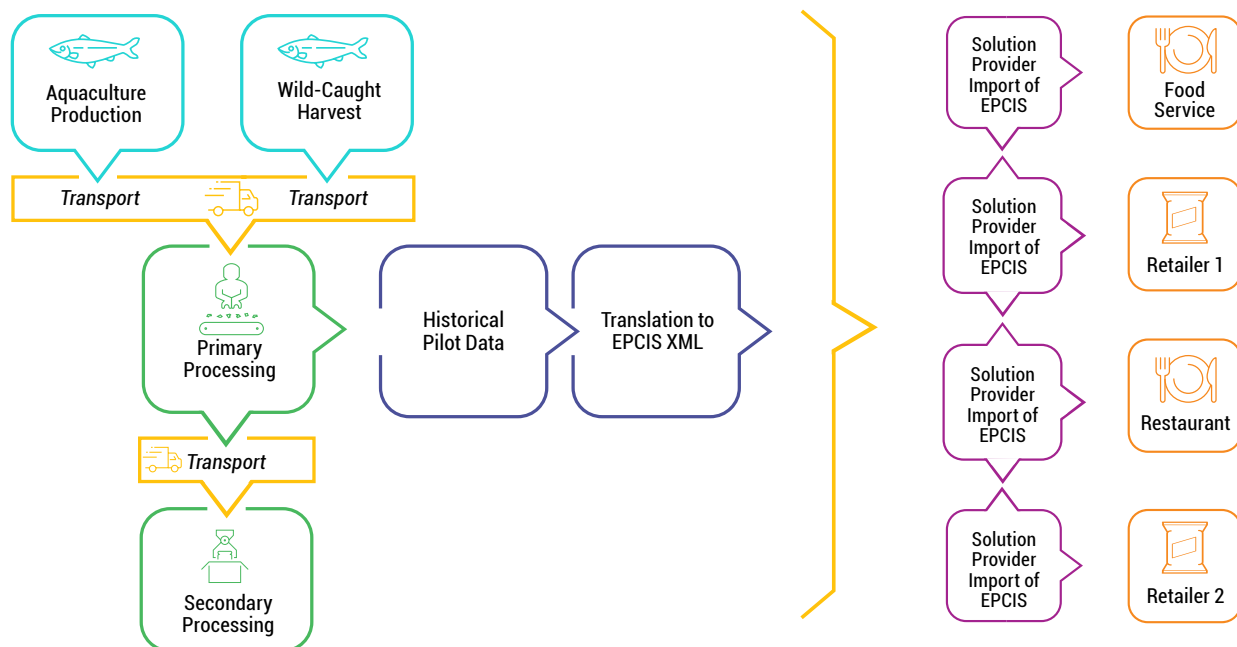
## Next Steps

There is a subsequent pilot to trace the wild-caught origin of protein in feed through feed production to use on shrimp farms.

## Methodology

This pilot further tested interoperability in another section of a supply chain included in the first wave of pilots conducted by the Global Dialogue on Seafood Traceability (GDST). Traceability data was collected by GDST co-conveners Institute of Food Technologists' Global Food Traceability Center and the World Wildlife Fund for Nature. The data was then translated into GS1's EPCIS XML schema to test interoperability between the subsidiaries' systems of a seafood product company in GDST.

The advantages of EPCIS are that it is designed to be used to represent visibility data within the supply chain and is well-suited for housing traceability data through its Critical Tracking Events (CTEs). Many supply chain partners, especially processors, distributors, and retailers used GS1 standards of identification and data sharing, including EPCIS. The file was developed through the collection of historical traceability data, translation to EPCIS, and testing with retail partners and their respective solution providers.



## Critical Tracking Events

Catches | Landings | Pack/Unpack | Ship/Receive | Transformation | Aggregation | Pack/Unpack | Ship/Receive | Transformation

## Supply Chain



## Catch Method

Purse seine

## Commodity

Tuna – Skipjack, Bigeye, Yellowfin – for ultimate use in shrimp feed

## Geographic region

FAO Zone 71 – West Central Pacific catch area, Landings in Marshall Islands and Thailand; Cannery in Thailand, and Feedmill in Thailand

## Participants



**CP Foods (Charoen Pokphand Foods Public Company Limited)** operates integrated agro-industrial and food business, including livestock and aquaculture such as swine, broiler, layer, duck, shrimp and fish. The businesses are categorized into 3 categories, namely Feed, Farm and Food. The Company also operates retail and foods outlets. With annual sales revenue of ~\$21 billion USD, CP Foods is a large, multi-national conglomerate with subsidiaries listed on both the Hong Kong and Taiwan stock exchanges. CP Foods was an early partner with GDST and has committed that all fishmeal used in the entire group are made from fish caught legally from traceable supply chains.

[cpfworldwide.com/en](http://cpfworldwide.com/en)



**The Global Dialogue on Seafood Traceability (GDST)** (also referred to as the Dialogue) is an international, business-to-business platform established to advance a unified framework for interoperable seafood traceability practices. The Dialogue brings together a broad spectrum of seafood industry stakeholders from across different parts of the supply chain, as well as relevant civil society experts from diverse regions.

The Dialogue is catalyzing the development of interoperable practices that will:

- Improve the reliability of seafood information
- Reduce the cost of seafood traceability
- Contribute to supply chain risk reduction
- Contribute to securing the long-term social and environmental sustainability of the sector.

[traceability-dialogue.org](http://traceability-dialogue.org)

## Get involved

**Is your company involved commercially in the seafood supply chain?**

**Would you like to participate in the Dialogue?**

Please fill out our application form or contact us:

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Applying is understood as an expression of interest in active participation, but does not create any commitments. Registered participants will receive invitations to on-line and in-person meetings of Dialogue working groups, and will be kept fully informed of the Dialogue process. Registration does not commit any participating organization or individual to attend meetings or to endorse the final Dialogue results.