



Data Harmonization



CrimsonLogic

Solutions. Simplified.

Data Harmonization

🎯 What is it?

Data Harmonization plays a critical role in Trade Facilitation, because it involves simplifying and standardising the information requirements of many stakeholders, especially regulatory authorities such as Customs and permit issuing agencies.

🎯 Why the need?

In December 2010, the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT) published Recommendation No. 34 for the “Data Simplification and Standardization for International Trade”. It describes the process and objectives of Data Harmonization as:

“Following the simplification and standardisation process described in the Recommendation guidelines, a government should be able to reduce the regulatory and official information requirements through the elimination or duplication of submissions and the removal of redundant data elements. The outcome of the process should be a more efficient and effective exchange of information between Trade and Government.”

Regulatory information requirements can be found on numerous documents used in international trade, including commercial invoices, packing lists, bills of lading, cargo manifests, Customs declarations, permits, licences and certificates. Therefore, one of the main objectives of Data Harmonization is to simplify and standardise the data on these documents, in order to streamline the government processes that require this information.

🎯 What we offer

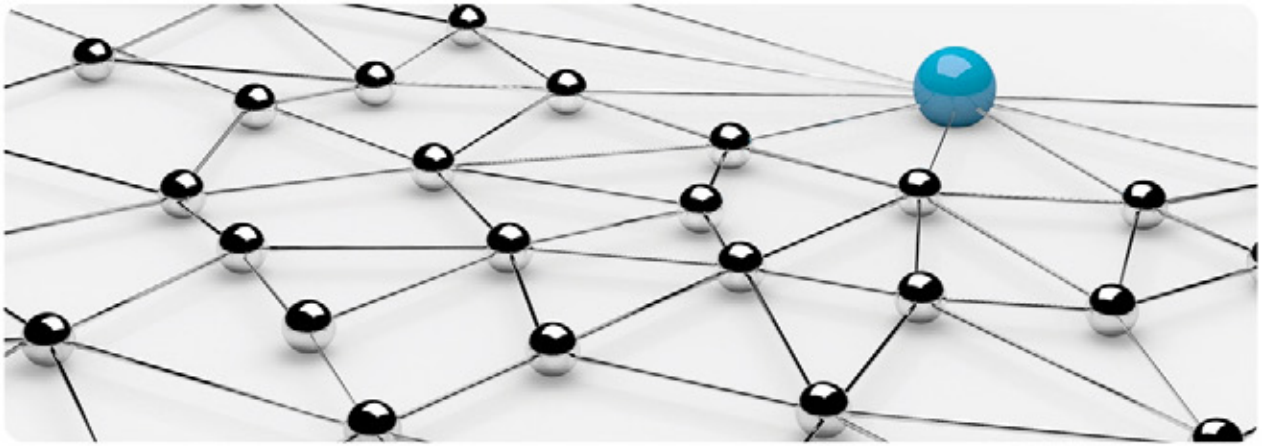
Since the implementation of Singapore’s TradeNet® in 1989, CrimsonLogic has successfully carried out Data Harmonization for projects in more than 10 countries. Our unrivalled experience in implementing Trade Facilitation solutions, especially in Single Windows, enables us to offer Data Harmonization as a value-added consultancy service. In addition to our track record, our consultants are also experts in the use and implementation of international standards, including:

United Nations
Trade Data
Elements Directory
(UNTDDED)

World Customs
Organization
(WCO) Data Model

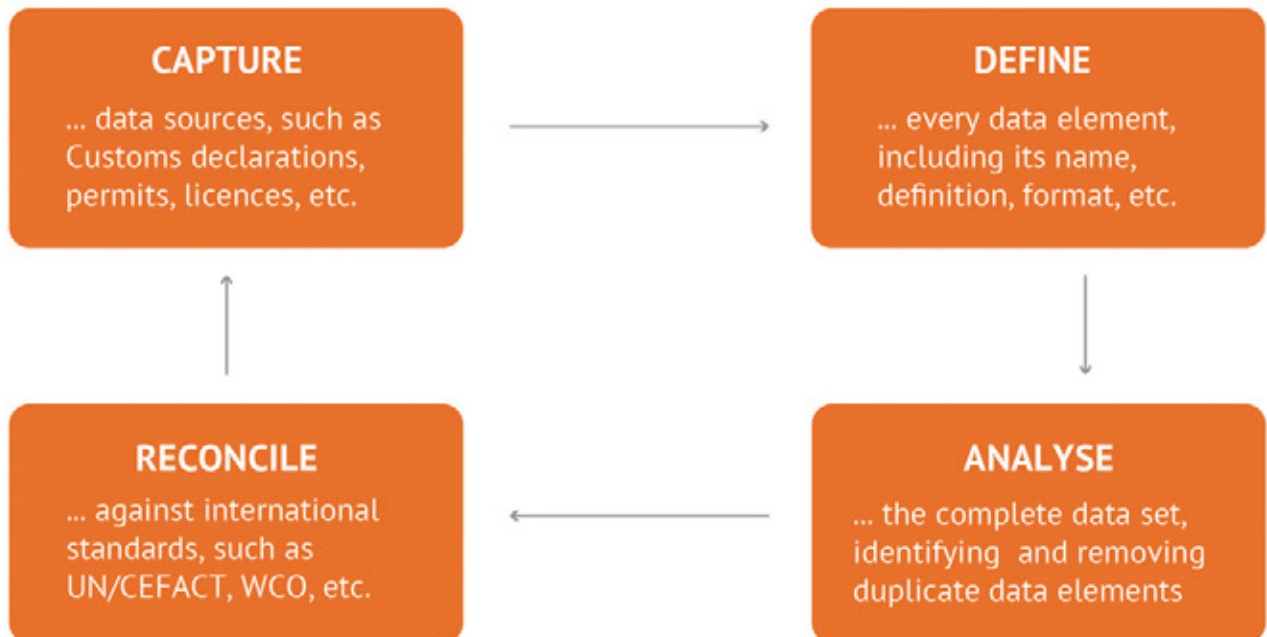
UN/CEFACT Core
Component
Technical
Specification
(CCTS)

UN/CEFACT
Core Component
Library (CCL)



🎯 How we do it

We use UN/CEFACT Recommendation No. 34 - "Data Simplification and Standardization for International Trade" as a guideline, where we adopt an iterative 4-step approach to harmonize data.



Capture

The first step towards developing a national, simplified and standardised data set is to identify the data sources. Typically, a data source could be a paper document, such as a Customs declaration, a permit or a licence to import/export, or even an existing computer system.

Define

Once the data sources have been identified, every data element is documented. Ideally, this documentation would include a name (e.g. "Consignor", "Expected Date of Arrival", etc.), a description, the data type (e.g. text, date, monetary amount, etc.), the maximum length, an associated code list (where applicable) and, the name of the data source (e.g. "Customs Declaration", "Health Permit", etc.).

Analyse

The next step involves analysing every data element to identify and remove duplications or in some cases, redundant information requirements. This is where our consultants' experience makes a difference to manage the challenges of such analysis. For example:

- There may be insufficient information about the data element, e.g. "What is the data element used for?", "What are the possible values?", etc.
- Agencies may use different terminology to label their data, e.g. "Is a Port of Unloading the same as a Port of Discharge?", "Is a Shipper the same as an Exporter?", etc.
- Labels may be the same, but the content could be different, e.g. "Is the Consignee stated on a Master Bill of Lading always the same as the Consignee stated on the Customs Declaration?"

At the end of this step, our consultants will produce the first cut of the national data set, more commonly known as a data dictionary. If this step is not executed correctly, it could result in too many data elements or even missing data elements.

Reconcile

The final step involves mapping the resulting data set against various international and regional standards, including the UNTDED, the WCO Data Model, UN/CEFACT CCL, etc. Our consultants are well-versed in the use and compliance with international standards.

🎯 Benefits

Reduction in the number of regulatory documents required to clear goods at the border.

Regulatory information can be submitted once and made available to all relevant government agencies simultaneously.

Data will be standardised in compliance with international standards and best practices such as the UNTDED, WCO Data Model, etc.

About CrimsonLogic

CrimsonLogic is a trusted partner to governments. For over 20 years, CrimsonLogic has worked with governments around the world to find innovative and sustainable solutions to collaborate more seamlessly with their citizens. The company has continued to set industry-standards by delivering the world's first eGovernment solutions. CrimsonLogic provides end-to-end services, from designing to operating these services to drive substantial and lasting improvements.

www.crimsonlogic.com

31 Science Park Road, The Crimson, Singapore 117611

For more information, please contact us at sales@crimsonlogic.com