Global Dialogue on Seafood Traceability

THE DIGITAL TRANSFORMATION JOURNEY

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GLOBAL DIALOGUE on Seafood Traceability

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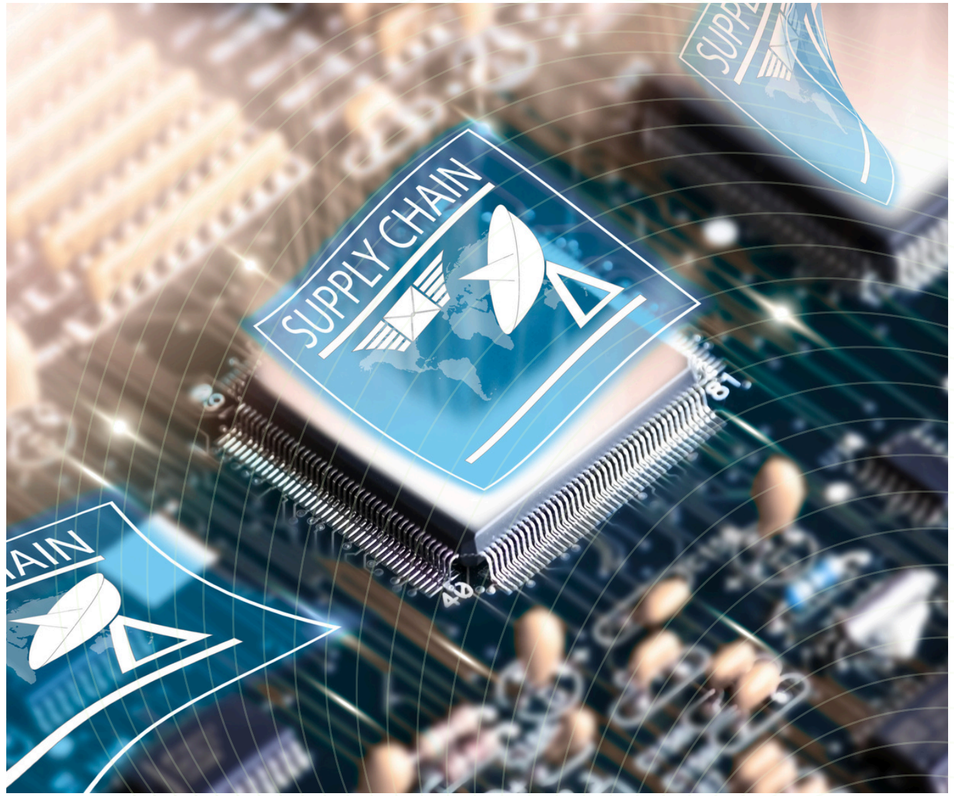
Why is Digital Transformation required?

As governments worldwide respond to calls for improved regulation to ensure safe, ethical, and sustainable global supply chains, industries are under increasing pressure to demonstrate their products meet requirements. In today's increasingly-scrutinised market, gaining a critical edge requires systems that deliver **digital interoperable traceability** - enabling data to pass seamlessly along the full length of the supply chain. Such systems ultimately enable organizations to share the origin story of their final products with transparency and credibility.

The Global Dialogue on Seafood Traceability (GDST) is leading the way for governments seeking to integrate traceability standards into their compliance systems and companies seeking to build consumer trust in their supply chains. Through the **GDST Standard**, developed with industry, a common-language has been defined that supports the development of comprehensive digital interoperable traceability solutions.

This document outlines the **digital transformation journey** that companies and governments move through to adopt the GDST Standard and implement digital interoperable traceability.



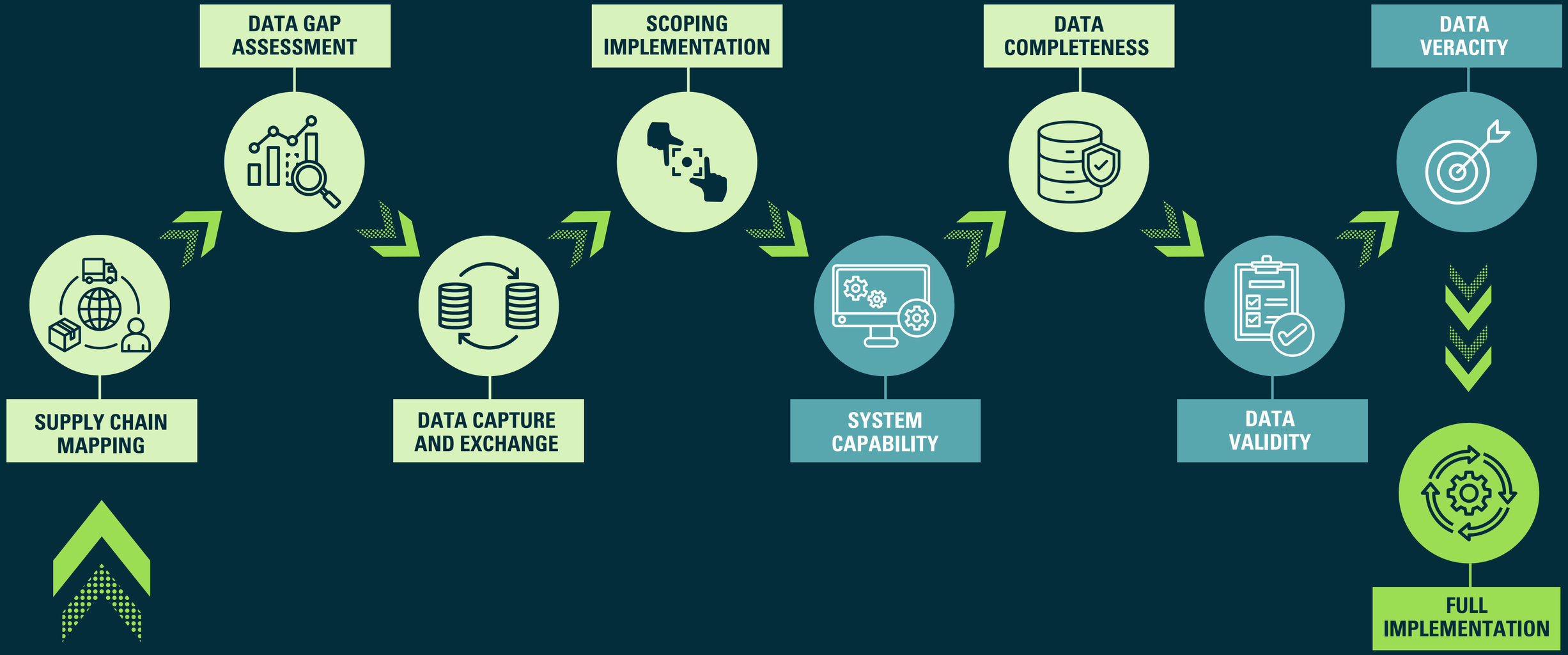
While it is not necessary to be a GDST Partner to follow this journey, partnership offers significant additional benefits, including access to free tools and tests to enable implementation at key points along the journey.

You can **find out more about GDST Partnership here**.

THE DIGITAL TRANSFORMATION JOURNEY **INDUSTRY**

INDUSTRY LEAD

GDST LEAD



1 SUPPLY CHAIN MAPPING

This is a critical first step in achieving **digital traceability.** In order to properly conduct due diligence, assess risk and implement the GDST Standard, it is essential to understand the people, products and processes making up the supply chain.

2 DATA GAP ASSESSMENT

To implement the GDST Standard, industry partners must identify and track a set of GDST key data elements (KDEs): data points required to define full traceability. This step maps which of GDST's KDEs and critical tracking events (CTEs, specific points in a food supply chain where a key action or transformation occurs) are present in the supply chain. Even if companies continue to use paper, spreadsheets and PDFs, they still need to adopt the GDST KDEs.

3 DATA CAPTURE & EXCHANGE

Identifying how traceability data is exchanged within supply chains and how the company implementing the GDST Standard wants to capture and exchange data is important. Adopting the GDST Standard doesn't require companies to subscribe to a specific method of data storage or transfer; companies can choose a blockchain solution, continue to share spreadsheets and PDFs or use cloud-based computing. However, companies need to ensure that their method of data capture and exchange is **GDST Capable** - i.e. the data can be translated into a GDST compliant digital package.

INDUSTRY LEAD

GDST LEAD

4 SCOPING IMPLEMENTATION

The scope of implementation is up to the company adopting and implementing the GDST Standard. The scope could be commodities alone, fresh or frozen produce, products for a specific customer or the entire supply chain. When determining the scope, it can also be helpful to have a clearly defined deadline and journey metrics.

5 SYSTEM CAPABILITY

Having GDST capable software and hardware within supply chains is crucial for implementation. Companies should map the hardware and software used across the supply chain, make an introduction to GDST and GDST will work directly with the hardware and software solutions identified to help them achieve GDST capability.

6 DATA COMPLETENESS

GDST offers a free **Completeness Tool** to all Partners so companies can measure completeness of their GDST traceability dataset. This tool can be used to determine how many KDEs are being collected at each CTE and how many CTEs in the digital supply chain a KDE is accessible for.

INDUSTRY LEAD

GDST LEAD

DATA VALIDITY

7

To be valid, data must be presented in the GDST format and nomenclature, with data located correctly. This will enable tools employed by the company, such as machine learning and artificial intelligence, to extract meaningful insights that inform risk assessments and due diligence processes. The GDST Capability Test, available to all Partners, ensures that data is in the correct format, and the GDST Diagnostic Tool, (which complements the Completeness Tool), identifies whether data transmission errors are software, hardware or data entry related.

DATA VERACITY

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Data veracity is critical to achieving full implementation of the GDST Standard. Data veracity - or data truthfulness - can be achieved when valid digital data about supply chains can be verified against data from government and third-parties. Also known as authoritative data sets, these sources enable confirmation that supply chain actors are operating legally, within their authorisations and within agreed specifications and policies. Data sets might include, for example, lists of authorised processing plants or fishing vessels. The GDST Standard includes a list of authoritative data sets to enable data veracity checks and the GDST is engaged in advocacy to extend the provision of authoritative data sets as governments move through the digital transformation journey.

INDUSTRY LEAD

GDST LEAD

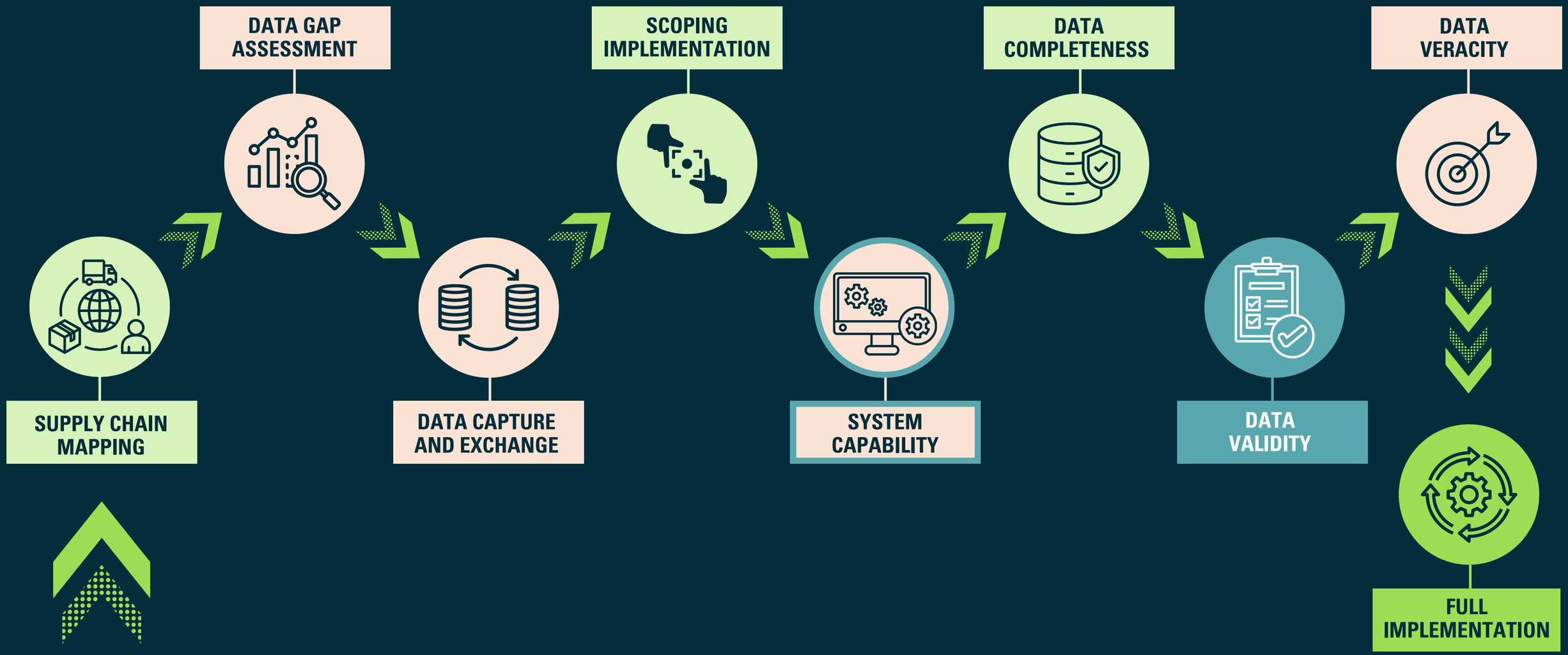
The Digital Transformation Journey for Governments

Governments seeking to enable the implementation of digital interoperable traceability have a critical role to play in assisting data flow. A full understanding of the adoption and implementation of the GDST Standard by industry actors, as outlined above, is recommended.

Governments can also utilize the GDST Standard to ensure their systems are GDST Capable. The steps involved for achieving full implementation of the GDST Standard are similar to those for industry, but require wider collaboration, with industry stakeholders and with GDST, responsibilities at each step are outlined below.

THE DIGITAL TRANSFORMATION JOURNEY **GOVERNMENTS**

INDUSTRY LEAD
GOVERNMENT LEAD
GDST LEAD
GOVERNMENT & GDST LEAD



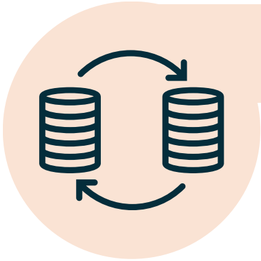
1 SUPPLY CHAIN MAPPING

This is a critical first step in achieving digital traceability. If not already known, governments should map the actors, products and processes making up the supply chains within their industries. This is necessary for conducting proper due diligence, assessing risk, and implementing the GDST Standard.

2 DATA GAP ASSESSMENT

To implement the GDST Standard, governments must identify and track a set of GDST key data elements (KDEs) at critical tracking events (CTEs) throughout the supply chains of their domestic market or exporting country industry. KDEs are data points required to define full traceability and CTEs are specific points in a supply chain where a key action or transformation occurs. There needs to be alignment on KDEs to enable digital interoperability. As traceability requirements continue to evolve, the GDST Standard will continue to adopt additional KDEs described for each CTE, and states can propose additional KDEs for adoption.

- INDUSTRY LEAD
- GDST LEAD
- GOVERNMENT LEAD
- GOVERNMENT & GDST LEAD



3 DATA CAPTURE & EXCHANGE

Governments can decide how they want to send and receive data with domestic and international companies. Governments need to ensure that their method of data capture and exchange are GDST Capable - i.e. the data can be translated into a GDST compliant digital package. GDST can often work with existing government databases, minimizing the requirement for agencies to establish new systems.

4 SCOPING IMPLEMENTATION

Like industry partners, governments can also decide on their scope of GDST implementation. For example, Indonesia's Digital Transformation Journey is starting with farmed shrimp, blue swimming crab and pole & line-caught tuna.

5 SYSTEM CAPABILITY

Having GDST capable software and hardware within supply chains is crucial for implementation. The GDST provides free support for governments to achieve and pass the Capability Test.

- INDUSTRY LEAD
- GDST LEAD
- GOVERNMENT LEAD
- GOVERNMENT & GDST LEAD

6 DATA COMPLETENESS

The responsibility for this step lies with industry partners. GDST offers a free Completeness Tool to all industry partners that measures the completeness of a GDST traceability dataset.

DATA VALIDITY

7

To be valid, data must be presented in the GDST format and nomenclature, with data located within the right columns. This will enable governments, retailers and supply chain actors to use tools such as machine learning and artificial intelligence to extract meaningful insights that inform risk assessments and due diligence processes. Again, the responsibility for this step lies with GDST

DATA VERACITY

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The final step for governments is to assist with data veracity by publicly hosting the authoritative data sets (valid digital data about supply chains) that industry needs in order to confirm that supply chain actors are operating legally, within their authorisations and within agreed specifications and policies. In addition to hosting these data sets, governments also bear responsibility for updating these data sources in a timely manner and making them easily accessible.

- **INDUSTRY LEAD**
- **GDST LEAD**
- **GOVERNMENT LEAD**
- **GOVERNMENT & GDST LEAD**

CONTACT

If you have any questions, please reach out to us at **info@thegdst.org**

Stay connected at:

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