GDST Standard Frequently Asked Questions

General Standard Information

What is the objective of the Standard?

The GDST Standard defines *what* data must be collected (KDEs – Key Data Elements) and *when* that data must be collected (CTEs - Critical Tracking Events) as products move through seafood supply chains. It also defines *how* that traceability data must be formatted and communicated digitally.

- The CTE/KDE matrix can be found in the [Core Normative Standards](#) and the [Basic Universal List of KDEs (BUL).](#)
- The protocols for data formatting and communication can be found in [Technical Implementation Guidance](#).

Why is it important to have a Standard?

Implementing traceability systems can be complex and challenging; it requires collaboration among all actors of a supply chain. A standard provides a clear framework for *everyone* to follow, easing the burden of implementation throughout the supply chain. A shared approach to traceability practices reduces redundant data collection, improves data reliability, and makes traceability more affordable and accessible to all stakeholders.

Standardization is also the foundation of technical interoperability – the ability of different systems to exchange and make use of information. With a common approach to data collection, formatting, and exchange, technology solution providers can design systems that interact seamlessly, without the need for customized integration between systems. This allows seafood companies to choose the system that makes business sense for them without worrying whether their choice will be compatible with systems used by suppliers and customers.

1.2 Update Information

Why was the Standard updated?

The GDST Standard is built upon a foundation of internationally utilized GS1 standards for traceability, specifically, GS1's EPCIS and Digital Link standards. In 2022, GS1 released an update to their EPCIS standard. The GDST standard was then updated in order to maintain alignment with our foundational standards and industry best practices.

What, specifically was updated?

The scope of this update was limited to the data format supported by the GDST. Previous versions of the EPCIS standard supported the use of an XML data format, the updated version supports the use of a JSON-LD data format. **Thus, we adopted JSON-LD as the data format for the GDST and made additional minor changes to align with EPCIS 2.0. Thes changes are reflected in the revised section 2 of the Technical Implementation Guidance Document.** No significant changes were made to the remaining Standard documents. **This update did not change the CTE/KDE matrix**.

Who will be impacted by this update and how will they be impacted?
This update will primarily impact solution providers and supply chain actors that use proprietary/internally developed traceability solutions. These solutions will need to be updated to support the JSON-LD data format if they do not already support it.

We do not anticipate that this update will be burdensome for GDST stakeholders. Many solutions are already using JSON and will require minimal updates to their systems. **In fact, the EPCIS standard (and the GDST Standard by extension) was updated to reflect industry demand and the widespread use of JSON.** For those that do not currently support JSON, open-source tools developed by the GDST are being made available to ease the transition.

What tools are available to support solution providers and/or in-house solutions through this update?
The GDST has created open-source libraries that will support a series of models that reflect the EPCIS/GS1 vocabulary models, mappers to support moving data into/out of XML/JSON/JSON-LD, and Master Data and EPCIS extensions specific to GDST. These will reduce the cost of developing standardized traceability software and improve interoperability between systems.

How will this impact GDST tests and tools? Will there be a transition period? What will this mean for GDST partners currently using the tools?
The GDST's tests and tools (i.e., the Capability Test and Completeness Tool) will continue to support XML *and* JSON data formats for six months after the 1.2 Standard is released; after this transition period, GDST tools will support *only* JSON. Those who have passed the Capability Test based on the 1.1 Standard requirements will need to re-take the test to ensure that their solution is aligned with the updated Standard.

Why can't the GDST support two data formats indefinitely?
Having a single data format is critical for interoperability. If the GDST standard allowed solutions to choose their preferred data format, interoperability would be lost as a solution using XML would not be able to communicate interoperably with a system that uses JSON. A single data format reduces the cost and complexity of interoperability for all actors.

The GDST updated the Standard in 2022 and now in 2023, is this going to continue to be a yearly cycle?
No, the 1.2 update is required solely because the underlying GS1 standard completed its first update in seven years to align with current best practices. There are currently no other updates planned for the technical requirements after the 1.2 update.