GDST Implementation Roadmap — A “Business-smart” Approach

Adoption and implementation of the GDST 1.0 standards is an excellent way for companies to make smart business decisions while showing public leadership for the future of the seafood industry. For some companies, the decision to adopt and implement the GDST standards is clear and straightforward—which is why dozens of companies have already publicly endorsed the GDST standards and started down the road to implementation. But for other companies, particularly those who did not participate actively in the GDST process so far, it may require some additional thinking and planning. This document presents a “roadmap” including a set of tools and recommended methodology to help companies evaluate the benefits and challenges of implementing GDST 1.0, and to develop company-specific plans for business-smart, phased implementation both internally and with supply chain partners.

The Roadmap Process — A Basic Schematic

The following diagram illustrates some of the key steps in the GDST implementation “roadmap” process. One key focus is to help each company collect and analyze the information needed to understand their own specific situation for GDST implementation. The process is also designed to help companies think through the business decisions needed to draft an implementation plan and initiate execution.

Each of these steps is explained more fully below, but here are a few general notes:

(a) The illustration above is a schematic only, and is not meant to be rigid or necessarily linear. The process can vary from company to company and not every company needs to take every step. The order of the steps may also vary or be applied at different times to different parts of a company’s operations or supply chains.

(b) Early in the process, companies are urged to review the GDST 1.0 materials and then publicly endorse the GDST standards by signing onto the adoption statement. In doing this, you join dozens of other companies that have already shown industry leadership by endorsing and promoting the standards. This will help ensure that the benefits of interoperable traceability bring lower costs and stronger supply chains to the industry soon.
The GDST Secretariat is comprised of staff at World Wildlife Fund and the Institute of Food Technologists, who have been convening the GDST, guiding companies through its process, and drafting the standards since its inception. During the roadmap assessments, some companies may wish to share the information they collect with the Secretariat (under confidentiality protections). However, it is possible to perform the assessments without divulging any information to the Secretariat.

The Roadmap Process – The Details

The following explains the details of each step in the Roadmap process. These steps not only help companies prepare for successful GDST implementation, they return value in themselves through the information they give you about your company and your suppliers. Although this process is designed to allow each company to proceed at its own pace, a suggested timeframe is provided. Most companies should be able to complete the basic assessment and planning process and be ready to start GDST implementation within three to six months.

Step 1. Rapid Initial Assessment (RIA) (Month 1) – The RIA is a survey tool available from the GDST Secretariat. Completing the RIA is the first step to understanding your company’s readiness for GDST 1.0 implementation. It helps you assess your company’s current traceability technology and practices, and (in a preliminary way) those of your supply chain partners. A designated person on your staff completes the survey in consultation with other appropriate staff, using existing internal knowledge within your company. Completion of this survey provides a basis for planning the next steps in the roadmap process and also helps educate your internal teams. Additionally, the RIA is a good basis for consultations with the GDST Secretariat, if you so desire.

Step 2. Supplier Assessment Survey (SAS) (Months 2-4) – The SAS tool helps determine the readiness of your suppliers to capture the required GDST Key Data Elements (KDEs) and to transmit the data to you in GDST-compliant digital formats. Like the RIA, the SAS is a survey instrument, but this time it is filled out by your suppliers themselves—you distribute it to them and you receive the responses (with or without assistance from the GDST Secretariat, per your choice). The SAS gives your company a detailed look at traceability practices within your supply chain, and also helps educate your suppliers about GDST 1.0. It can be used with all of your suppliers at once, or can be distributed in phases to different parts of your supply chain (prioritized by product category, geography, volume, or other criteria). Completing the RIA (Step 1) can help you determine how you want to use the SAS. Each time you distribute the SAS, you should allow approximately 30 days for completion of the survey and review of the results.

Step 3. IT Conversion Mapping (Months 1-5) – The GDST Secretariat has also developed an online tool to assist company IT experts (or third-party IT service providers) in concert with other pertinent staff (e.g. supply chain or procurement managers) to understand the technical dimensions of adherence to the GDST 1.0 standard to enable interoperability between supply chain partners. The tool, which is best used in conjunction with the RIA and the SAS, gives a clear picture of how the GDST 1.0 data standards apply to your company’s supply chain contingencies, and gives technical outputs which can guide mapping attributes from internal data systems. This can help assure that GDST formats are fully workable for your suppliers.
company, while also enabling an assessment of technical needs and costs of adopting GDST-compliant IT. The IT Conversion Mapping tool produces a process flow diagram that gives additional insights into current data collection practices within your company and/or your supply chains. Additionally, the tool produces a sample XML file for your IT team or solution provider to use as a basis for its part of the roadmap to IT implementation. Although not all companies will need to use this tool, companies that went through a similar process during the GDST pilot testing phase found it valuable for understanding the operational feasibility of GDST implementation. The tool can also be an educational tool for exploring how data collection requirements work across critical tracking events. As with the other tools, the GDST Secretariat is available to provide assistance as needed/desired.

**Step 4. Analysis, Triage, and Preparation of a Roadmap (Months 4-6)** – On the basis of the foregoing steps, companies can work (with the support of the GDST Secretariat, if desired) to develop a comprehensive vision of opportunities and challenges for achieving GDST compliance within your company and across your supply chains. The information developed in the previous steps will help answer such basic questions as:

- What are the right implementation goals for my company? (E.g., Level of internal digitization? Level of systems integration (such as with ERP systems)? Level of preparation for audits/trace-backs? Data security objectives? etc.)
- Internally, what kinds of new hardware or software (or third-party service providers) might be needed? Will implementation require changes in product handling, such as adjustments to the use of physical identifiers for your company’s production lots?
- Externally, which parts of your supply chains are most ready for GDST implementation? Can they achieve full GDST compliance quickly, or will it require a phased approach?

As answers to these and other business questions emerge, companies can complete an initial “triage” analysis that places external suppliers (and, in some cases, your own internal production lines) into three groups to support a phased approach to GDST implementation:

**Group 1 (”Early Implementation”)** – This group includes suppliers (and/or internal product lines) already capable of working with data in GDST-compliant EPCIS format, and who are already collecting many of the GDST KDEs.

**Group 2 (”Near/Medium-Term Implementation”)** – This group includes suppliers (and/or internal product lines) that have digital traceability systems and good access to KDEs, but whose systems will require development to upgrade capabilities through adoption of GDST open-source tools or other GDST-compatible approaches.

**Group 3 (”Longer-term Implementation”)** – For many companies, most or all of their suppliers may fall into Groups 1 and 2. But others will have a third group of suppliers (and/or internal product lines) that have underdeveloped digital systems (or are still heavily paper-based), or whose current collection of KDEs falls significantly short of GDST standards. These will require greater levels of investment and assistance to achieve GDST compliance.

**Step 5. Finalization of an Implementation Plan** – On the basis of the foregoing, companies can finalize a roadmap to GDST implementation that outlines a clear implementation plan -
identifying priorities, opportunities, and challenges. This roadmap can take into account all relevant business considerations including readiness of technical systems, risk mitigation priorities, customer requirements, synergies with certifications or FIP/AIP investments, implementation costs, etc. Companies may prefer a roadmap based on specific product lines, species groups, supply chain geographies, or other considerations. Here again, the GDST Secretariat will be ready to assist as desired.

**Step 6. Initiate Implementation!** – The future of the seafood industry will be significantly strengthened by the widespread availability of interoperable seafood traceability systems. Companies can help accelerate the transition to interoperability—and position themselves to reap the early benefits—by working internally and with supply chain partners to begin GDST 1.0 implementation as soon as possible.

For further information about the roadmap approach to GDST implementation, please reach out to the GDST Secretariat at info@traceability-dialogue.org.