

# IFT Traceability Improvement Initiative and August 2011 Summit



IFT's Traceability Improvement Initiative aims to advance work in the area of food product tracing through the hosting of events where thought leaders can exchange knowledge and ideas, and by supporting research conducted by IFT, including a pilot focused on interoperability. It also provides funding for the generation and dissemination of IFT's product tracing work, so that food system stakeholders have ongoing access to cutting-edge thinking, trend information, and research. This initiative is supported by BASF Nutrition & Health and Underwriters Laboratories (at the silver level) and the Fisheries Scholarship Fund of the National Fisheries Institute (at the bronze level).



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50 food system stakeholders in:

- Trade associations
- Regulators
- Technology Providers
- Standards Organizations
- Consultants
- And more

## About the August 2011 IFT Traceability Summit

### Pilot Studies

Discussions at the July 2011 Summit prompted the request by participants for more formal presentations of ongoing or completed work on recent pilots or "real life" implementation studies within the food industry. At the August 2011 Summit, representatives conducting pilots in produce, seafood, dairy, and other industries discussed their objectives, challenges, and key learnings.

The following common themes relating to the conclusions and challenges associated with traceability emerged from the various pilots studies:

Challenges	Conclusions
<ul style="list-style-type: none"> <li>• Training, communication and collaboration between all stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Data often exists but can be better used to provide product tracing</li> </ul>
<ul style="list-style-type: none"> <li>• Complexity of the value chain</li> </ul>	<ul style="list-style-type: none"> <li>• Better information management provides return on investment</li> </ul>
<ul style="list-style-type: none"> <li>• Reliability, quality, and security of data captured, stored and shared</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced tracing enables better accountability and quality control</li> </ul>
<ul style="list-style-type: none"> <li>• Standards in data and interoperability of technology</li> </ul>	<ul style="list-style-type: none"> <li>• Pilot learnings need to feed operational projects</li> </ul>

"Clearly the industry has moved past the organizing piece of the process and is ready to hammer out the foundational components that are needed to create a new level of practical supply chain traceability."

— August 2011 IFT Traceability Research Summit Attendee

## IFT Traceability Summit Highlights

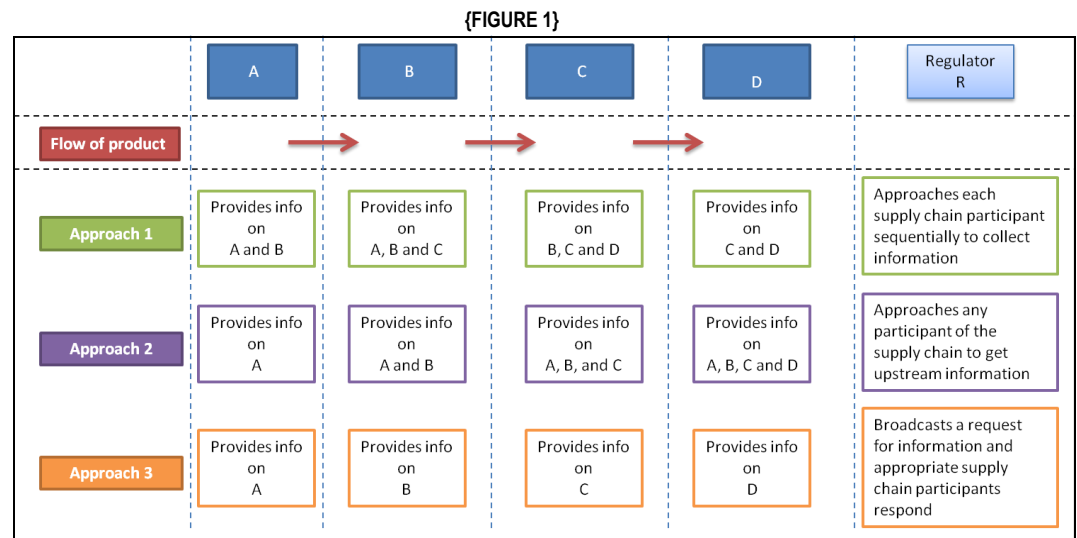
### Goals of Traceability

At a minimum, a product tracing system must enable regulators to determine the point of convergence of products to better assess if product categories, brands, or lots may or may not be associated with an outbreak. The system in turn enables industry to determine if they handled the product, and can take necessary actions to remove it from commerce. There was general consensus among the participants that improving public health is paramount. However, the benefits to industry of improved traceability should also be considered and articulated.

### Approaches to Achieving Goals

Three approaches, as shown in **Figure 1**, were discussed to improve the traceability system. The first approach incrementally improves upon the current “one up/one down” system by requiring electronic records and tracking internal as well as external critical tracking events. The benefits of this approach are its similarity to existing regulatory requirements and low cost of implementation, resulting in a higher probability of adoption. The major disadvantage to this process is the longer response time required during a trace (back or forward).

The second approach is similar to a “pedigree” approach where historical information about the food travels with it through the value chain. A major advantage of this approach is the quick response time during a trace. Some of the disadvantages of this approach are high potential for misuse of data, large volume of data required to be maintained at value chain end points, and significant data privacy concerns.



Finally, the third approach requires individual nodes within the value chain to maintain electronic records for its own data and make them available for querying during a traceback for outbreak investigation. The major advantage of this approach is the protection of confidential information and the potential for quicker access during a trace. However, the primary disadvantage of this approach is the need for greater computational power and a more complex mechanism to link the value chain through the data.

Overall, the participants felt the most likely approach will be a hybrid between the first and third approach. Regardless of approach, there was consensus that the Key Data Elements (KDEs) and Critical Tracking Events (CTEs) of a traceability system need to be better defined and aligned with the goals of traceability.

### Data Capture and Sharing Considerations

A CTE occurs any time there is a change in the state of a food product including shipping, receiving, transformation, and use. KDEs are the “Who, What, Where, When and Why?” attached to each CTE. Consensus was reached among the participants that case level or batchlot level granularity is more meaningful than pallet level tracking. However, CTE and KDE data should be shared only when an authenticated formal (electronic) request for information is received. Requests for information are valid only under limited situations such as: on-going public health emergency, a traceback for an outbreak investigation, or to execute a (mock or real) recall or market withdrawal. Due to food defense concerns and recent outbreaks associated with products previously believed to be “low risk,” the group generally felt that all food products should be subject to the same traceability requirements.

### Next Steps:

A subgroup will work on clarifying the approach to meeting the goals of traceability, better defining critical tracking events, and articulating the strategy and return on investment from a regulatory and industry perspective. This will result in improved alignment of on-going traceability pilots and initiatives, along with a more actionable guidance document for public review, and eventual industry adoption.

Full proceedings, and other resources, will be available online at [ift.org/traceability](http://ift.org/traceability). To get involved in the IFT Traceability Improvement Initiative, contact **Jennifer McEntire** at [jmcentire@ift.org](mailto:jmcentire@ift.org).