Background:
This discussion document aims to build on two related topics: Strengthening Organic Enforcement (proposed rule) and Human Capital, by seeking input from the organic community on modernizing supply chain traceability to best match the size and scale of today’s industry and future needs. While the pending SOE rule pulls the industry forward in many ways, the Compliance, Accreditation & Certification Subcommittee (CACS) is suggesting additional tools such as an electronic organic link system (OLS), which could capture business-to-business sales providing continuity across the supply chain.

The Organic program is a fully traceable food system. When operating at its full potential, products are traceable through the supply chain back to the fields in which the ingredients were grown. It’s commendable that stakeholders from across organic sectors were able to collaborate to develop such a robust system. The CACS is seeking stakeholder input as it considers the next steps in modernizing the system.

In 2021, the organic industry exceeded $60 billion in sales. While technology has drastically improved since the implementation of OFPA the organic community must acknowledge that the original infrastructure used to track fraud and provide transparency needs to be updated based on today’s standards and available technology.

Human Capital and Data Management in Organics:
Inspectors and certifiers do an incredible job maintaining a system using the tools they have. Organic operations undergo annual inspections, and at every annual inspection, organic inspectors test the integrity and traceability of an operation’s record-keeping system by conducting a trace-back and mass balance audit. This process ultimately tests record-keeping to see if all products are fully traceable and to confirm there’s no evidence of product substitution (conventional for organic). However, this traceability system and the tools inspectors and producers use to verify records and test integrity can be significantly improved with current technological systems.

The decentralized, opt-in system that has sustained the inspection process so far and offered exceptional (for the food industry) transparency is impaired by its decentralization and lack of industry-wide consistency. How one operation proves its system integrity versus another makes the inspection process inconsistent and reliant on the inspector’s information on the day of inspection.

Currently, there is not a centralized database to track business-to-business sales and purchases. Also, lack of mandatory reporting to a central database, i.e., the Organic Integrity Database, restricts the ability to glean large, supply chain-wide insights into potential fraud in the organic system. If each business-to-business purchase of ingredients or sales of organic products were recorded and reported to a central database, instances of fraud could be easily identified and addressed. Inspectors would have a way to cross check and reconcile data on both sides of a transaction. In other words, inspectors don’t
have a tool to check that information reported to them by one operation reconciles with that operation’s customers or suppliers.

To address this, the CACS would like to explore the “organic link” concept, a data point, which would show the date, NOP number, lot number, growing year, and quantity of organic goods processed through business-to-business sales.

**SOE Defines Four Integral Concepts Providing Guidance for Improvements:**

1. *Organic integrity:* The unique attributes that make a product organic and define its status as organic. A product that fully complies with the USDA organic regulations has integrity, and its organic qualities have not been compromised.

2. *Organic fraud:* Intentional deception for illicit economic gain, where non-organic products are labeled, sold, or represented as organic. This may include substitutions or deliberate mislabeling, falsified records, and/or false statements in applications or organic system plans or during inspections, investigations, and audits. (Proposed added term 205.2)

3. *Audit trail:* Documentation that is sufficient to determine the source, transfer of ownership, and transportation of any agricultural product labeled as “100 percent organic,” the organic ingredients of any agricultural product labeled as “organic” or “made with organic (specified ingredients)” or the organic ingredients of any agricultural product containing less than 70 percent organic ingredients identified as organic in an ingredients statement (7 CFR 205.2).

4. *Supply chain traceability:* The ability to identify and track a product (including its location, history, and organic nature) along its entire supply chain, from source to consumption and/or “backward” from consumption to the source. A supply chain audit assesses supply chain traceability for specific products, verifying whether records show all movement, transactions, custody, and activities involving the products.

The Strengthening Organic Enforcement proposed rule presents a significant step forward for the industry. By requiring brokers and previously exempt handlers to seek certification, SOE closes significant loopholes for fraud while improving overall system integrity. However, with considerable progress comes the need for comparably powerful tools. The CACS is exploring resiliency of the tools at hand.

**Continuous Improvement Exists for Supply Chain Traceability:**

The proposed SOE guidelines for improvements are helpful. However, the standard tools that certifiers, inspectors, and the organic community need to improve supply chain traceability are undefined. The SOE proposed rule challenges the organic community to answer the call for continuous improvement post-rule implementation.

Increased inspections and certifications for brokers and previously exempt handlers within the organic supply chain will undoubtedly enhance the system’s integrity. Still, suppose these inspections, and all inspections, continue to occur in isolation. In that case, the increased surveillance is left impeded by the inability to glean deeper insights forwards and backwards throughout the supply chain.

Many technologies exist to assist in the process. Electronic systems, digital ledger technology (DLT), blockchain, etc., are being tested or leveraged commercially in the food and agriculture industry. The current form of the proposed SOE rule points to technology as playing an essential role in entire supply
chain traceability, fully verifiable organic products, and near-instantaneous tracking at the item level in complex supply chains. Technology will ultimately enhance and support the enforcement of OFPA requirements.

**Organic Link System (OLS):**
To further build upon the SOE proposed rule, and import certificates, which are a requirement of the SOE proposed rule, the CACS is exploring ways to address the need for additional granularity to verify all sales at a field level and throughout the supply chain. -There can be many landing spots for shelf-stable products like grain, including warehouses, ports, handlers, etc., leading to higher risks of co-mingling or contamination that require additional verification. Therefore, the CACS is suggesting an organic link system (OLS), which could provide an extra level of granularity.

OLS is best defined as an electronic tool that captures registered business-to-business transactions, providing continuity in verification and traceability across the supply chain. OLS could provide a bi-directional look back by certifiers and inspectors involved across the different product exchanges and could prevent sales duplication of a specific parcel or co-mingling organic and non-organic products.

**OLS Implementation and SOE Compatibility:**
OLS implementation requires that business-to-business transactions be electronically recorded into a centralized database. Specific data to be captured would include the date, NOP certificate number (found on the SOE standardized certificate), year product was grown, the quantity of organic goods exchanged, etc. This critical data would be recorded by businesses (handlers, brokers, importers, etc.) involved in the transactions within the organic supply chain. The information would be accessible to certifiers and inspectors through a variety of different permission levels.

An organic link system allows certifiers and inspectors to conduct bi-directional traceability along the supply chain (source to consumer) more effectively and efficiently. As quoted in the current SOE proposed rule, “We (AMS) anticipate that electronic tracking technologies will allow AMS to achieve its goal of complete supply chain traceability and foresee incorporation of electronic tracking systems into future enforcement strategies.”

Through leveraging the OLS, the amendment put forth in the SOE stating, “Certifying agents must share information with other certifying agents to verify supply chains and conduct investigations (§ 205.501 and § 205.504)” can more easily be accomplished.

Without an OLS, it will be challenging to execute SOE’s requirement for “certifying agents to create fraud prevention procedures to identify high-risk operations, conduct risk-based unannounced inspections, supply chain trace-back and mass-balance audits, and share information with other certifying agents to verify supply chains and conduct investigations.”
Barriers and Solutions for OLS Integration:
In looking at an electronic organic link system (OLS), the organic stakeholder community must identify and help solve barriers that exist or could exist for future technology integration. Three known barriers are as follows:

1. **Inadequate access to technology and connectivity:**

   **Solutions to consider:** Accessibility to technology and connectivity doesn't have to become a limiting factor. Specifically, the NOSB recognizes the need to not burden organic farmers, certifiers, or inspectors with additional paperwork. Therefore, the first documented exchange occurs at the point-of-sale from a farmer to their buyer and then each step following. Handlers, brokers, importers, and others involved in business-to-business exchanges will bear the recording responsibilities. Re-positioning the initial point of data capture to the first transaction will provide valuable information for a two-sided look back through the various business-to-business transactions in a complex supply chain.

   Since an organic link system is a business-to-business look-back system, producers who sell directly to consumers (i.e., CSA's, direct meat sales, and farmer/processors packaging their goods for sale to customers) would be exempt from this system.

   **Organic Link System Illustration Example:**

   ![Organic Link System Illustration](image)

   Despite the potential of having various certifiers and inspectors for each of the entities listed below, an organic link system can provide comprehensive verification.

2. **The expense of implementing an electronic system:**

   **Solutions to consider:** The USDA's Organic Integrity database (INTEGRITY) was designed with expansion in mind and will become an even more critical clearinghouse of industry-wide data with the future implementation of the SOE proposed rule. As stated in the SOE, "certifying agents to issue standardized certificates of organic operation generated from INTEGRITY and to keep accurate and current certified operation data in INTEGRITY. This would require an initial upload of mandatory data for each operation and maintenance, at lease annually, to ensure that data in INTEGRITY are current and accurate."

   Therefore, standard operating procedures are being implemented and point to further use of technology. Adding additional reporting capabilities to capture transactional level exchanges is the next phase.
3. Human Capital:

**Solutions to consider:** Public comments at the Spring 2021 NOSB meeting highlighted concerns that certifiers believe organic systems are continuously becoming more complex. In addition to increased numbers of certifications and inspections across the supply chain, the SOE proposed rule states “to facilitate trace-back audits, investigations, and verification, AMS proposes amending the organic regulations to clarify that certifying agents must share information with one another for the purposes of certification and enforcement.”

Further developing electronic tools and centralized electronic reporting will aid in enforcement and oversight through more efficiency, not less. The SOE proposed rule captures this sentiment stating, "Standardization will simplify the verification of valid organic certificates and import certificates. It will also reduce reporting, by eliminating the need to provide notices of approval or denial of certification and annual lists of certified operations to USDA."

Without an organic link system or a similar system, a one-way look back is achievable, however, complete supply chain traceability is extremely difficult. With an OLS, dual-process verification of complex supply chains involving multiple certifiers and inspectors can be a reality through leveraging universally recognized certified NOP numbers and other vital data. This data would be available for inspectors to use as an audit framework when conducting inspections on site.

**Summary:**
Technology integration to further modernize the organic verification and traceability system is fundamental. Creating a system to report transactional data to a centralized database would provide the most significant insights for preventing fraud. The industry can then operate in a pre-competitive space to create a uniform system under which all operations, foreign and domestic, will perform. Therefore, transitioning our current system from process-driven certification to data-driven certification with electronic verification is imperative. Integrating technology to identify fraud in the supply chain quickly is essential, ultimately ensuring a level playing field between all producers, foreign and domestic.

Formalizing technology integration for complete supply chain traceability within the organic system could be incorporated into the 2023 Farm Bill. Technologically driven organic supply chain traceability insures an even playing field. It supports organic growers who are investing in climate-smart farming practices and supports developing rural America.

As discussed in this document, it is imperative to continuously improve and modernize transparency in a post-SOE implementation world. Barriers always exist for continuous improvement, but with the collective participation of the stakeholder community, we can ensure integrity by modernizing organic supply chain traceability through technology integration.

The NOSB calls on the organic community to share best practices and ideas regarding the most appropriate and innovative technologies that can be leveraged to execute the aims of an organic link system.
Questions for Stakeholders:

1. How can technology efficiently and effectively be deployed to enhance supply chain traceability?

2. What form does an organic link system (OLS) must take to be non-burdensome for organic stakeholders, including certifiers, inspectors, handlers, operations, importers, etc.?

3. What challenges exist with the implementation of an organic link system (OLS)?

4. Is there value in AMS, certifiers, and inspectors getting more granular with transaction-level detail to gain transparency throughout the complex supply chain?

5. What other methods exist for enhancing transparency?

6. Are there additional areas that need to be considered for improvement to prevent fraud or react to fraud?

7. Should the industry require the registration of land 36 months before certification?

Note: The USDA Risk Management Agency (RMA) currently tracks the organic status of the land when transitional land is insured. RMA also requires a registered plan on transitional acres. Domestic and International operations reporting the last restricted use pesticide data for land could stabilize markets and allow for enhanced risk assessments simply by knowing what is coming down the pipeline.

Vote in Subcommittee
Motion to accept the discussion document on oversight improvements to deter fraud: Modernization of Organic Supply Chain Traceability
Motion By: Amy Bruch
Seconded By: Nate Powell-Palm
Yes: 7 No: 0 Abstain: 0 Absent: 0 Recuse: 0

Approved by Nate Powell-Palm, Subcommittee Chair, to transmit to NOSB, August 13, 2021.