Quick Synopsis of AgGateway’s Current Work
For AgGateway’s Mid-Year Meeting, June 10, 2019

Here is a high-level overview of AgGateway activities, in alpha order. It is project-specific and does not include ongoing great work being done by AgGateway committees and other groups. If we’ve missed something, let us know by telling Member Services!

ADAPT: ADAPT is AgGateway software that enables agriculture-data interoperability. It is free and open source. The open source license is business friendly. Version 2 was recently released. The ADAPT team is adding features and fixing bugs in preparation for upcoming releases of the ADAPT Framework, the ADAPT Plugin, and the ISOXML Plugin.

Aerial Imagery (PICS): Aerial imagery can be an informative addition to a grower’s decision-making process. Unfortunately, much of the aerial imagery produced today lacks sufficient metadata to enable users to get the most value out of the imagery they receive. AgGateway’s Aerial Imagery Project (PICS) is defining metadata standards. The specification is in its final review by the working group.

Ag Retail Connectivity Planning: The Ag Retail Council and other interested members have been following up on the successful “Quick Connect” sessions to explore other ways to encourage sessions for trading partners to meet and establish concrete plans for implementation.

Automated Identification Data Capture for Products (AIDC): The AIDC Working Group’s primary objective is to promote and enable automated identification capture for products throughout the input supply chain. The working group has documented processed, updated barcoding guidelines, and developed promotional material. The group has encouraged implementation of appropriate barcodes on product packaging and use of barcode scanners throughout the supply chain. Adoption to date has been slow, reportedly due to poor barcode support by manufacturers. Distributors and retailers have repeatedly asserted that they would invest in automated identification systems once standard barcodes are widely available on product packaging. The group is continuing its promotion efforts.

Business Rules Task Force (Cross-Council): This task force has been exploring areas where the various council segment implementation business rules can be harmonized. The group has been reviewing a draft harmonization document. The end goal is to deliver a Cross-Council Harmonized Business Rules document to be stored on the wiki page with other reference documents, managed by the Standards & Guidelines Committee.

Channel Integrity: Seed and crop-protection products in North America frequently flow through unauthorized channels. The Channel Integrity Project is conceived as a solution to help the industry restore supply-chain integrity. The first phase is to execute a proof-of-value exercise. As of June 2019, Land O’ Lakes and BASF have committed funds to bootstrap the effort. This project would likely use blockchain with a vendor-provided solution. Substantial costs are estimated for later phases (pilot, operational). Consequently, it may take a few months to secure funding.

Dispensing Work Order (Mix Ticket): Several AgGateway member companies that produce fertilizer blending equipment agreed to work together to develop standards to support blending processes. The working group developed version 1 of a standard for dispensing work orders and dispensing work records. The work order specifies amounts and sources of inputs into a blending (mixing) operation as well as the output locations. Work records include data about what was actually done. The working group is currently making refinements to version 1.
**Grain Traceability (CART):** Tracing grain from field to fork is a major challenge, but one that AgGateway is tackling in its Grain Traceability Project. The group completed its first proof-of-concept and is presently working through its second proof-of-concept.

**Irrigation (PAIL):** AgGateway’s irrigation work addresses processes and data requirements that enable more effective water management, thus conserving both water and energy. There are three parts to this irrigation standards work. Two parts were approved by AgGateway, then approved by ASABE (ANSI ASC) as a U.S. national standard, and then submitted to ISO to become a global de jure standard. The remaining part is in final review by the working group in AgGateway.

**Product Catalog:** Some cooperatives are offering (or plan to) branded online store services to their retail members. Crop protection and seed manufacturers want to ensure that such online stores have complete, accurate, and up-to-date information. They want to define the data requirements and data standards to support that objective. This project has just started. The team is focusing on crop protection products first, working towards a minimum viable product (MVP) catalog format and building out seed and other segment data from there. The goal is to have the MVP complete and presented to AgGateway’s Standards & Guidelines Committee by the end of September.

**Reference Data API:** AgGateway distinguishes “reference data” from “transactional data”. Reference data is the data specified in advance of the transactions in which they are used. This includes data such as code lists, identifiers, product information, and configuration parameters. The Reference Data API Working Group is specifying a solution to the challenge of acquiring reference data by users who require it. The working group has agreed to basic API principles and has stood up a proof-of-concept service.

**Seed Transfer:** The Seed Transfer Working Group has documented processes and data requirements to support seed transfers, seed replants and license management. The working group has submitted their work to the Standards & Guidelines Committee, which approved the work. The work should go out for public review in July.

**SPADE “Clean Up”:** A tremendous amount of work was accomplished under the SPADE precision ag project for interoperability in field operations. Now the teams are working to format documentation in a helpful way for the industry; work will be proceeding at Mid-Year Meeting and in the weeks ahead.

**Testing:** Timely and effective soil, tissue, nematode and water testing are key agricultural success factors. The Testing Project is specifying testing-related processes and the data requirements for messages exchanged to support the processes. The working group is close to completing process modeling and has made significant progress on specifying data requirements. AgGateway has also initiated a legal review process with the goal of referencing and/or incorporating Modus resources.

**Traceability (Crop Protection and Seed Traceability):** Standards for agriculture-input supply-chain operations are broad and mature. Standards for field operations are less complete and less mature. Standards that address operations at the intersection of supply chain and field operations have not been developed. This project begins to explore what can be done to address this situation. The working groups established themselves as a diverse set of domain experts that together can piece together the full picture of operations at the intersection of supply chain and the field. The teams have documented processes and have begun to identify data requirements.

**Learn More:** If you are interested in learning more or getting involved in any of these activities, contact us at Member.Services@AgGateway.org.