

## Message Points and Testimonials for AgGateway and by Council

### AgGateway Message Points – General

- I. **AgGateway empowers agri-businesses** to better master how they use and exchange their information, a critical factor to success in an industry focused on maximum efficiency and productivity.
  - a. Mastering the use and exchange of data has been called one of the most revolutionary advances that agriculture will experience in our lifetimes. AgGateway is the forum where essential dialogue and work fueling this information revolution are taking place.
  - b. Successful agri-businesses in today’s economic and regulatory environment are focused on efficiency, productivity, accuracy – and the cost savings that come from all of these factors and from tight financial management of large scale costs.
  - c. The ability to seamlessly exchange data is crucial as agri-businesses throughout the supply chain seek to increase efficiencies and productivity.
  
- II. **The work of AgGateway teams has positive and proven benefits** both for individual companies, and in benefits that multiply as you exchange information with your trading partners.
  - a. As a result of the work at AgGateway:
    - **Progressive companies** are adopting new resources and communication technologies.
    - **Precision agriculture solutions** are finally being forged to enable the exchange of data between Farm Management Information Systems (FMIS) from different manufacturers’ software and hardware applications.
    - **The entire supply chain is reaping the benefits of increased efficiency and subsequent cost savings** as companies increase connections with their trading partners.
    - **Many companies are significantly improving their order-to-invoice processes.** Customer service representatives are focusing on helping customers instead of data entry.
  - b. The work at AgGateway is created in collaboration with U.S. and international standards organizations so that solutions are in sync with industry and government efforts, and work internationally.

**III. AgGateway provides a unique, successful model that continues to produce solutions and attract industry participation.**

- a. At AgGateway, collaboration takes place within a safe, anti-trust compliant environment and results in effective, real-life solutions that benefit individual businesses and the industry as a whole.
- b. AgGateway is unique as a non-profit organization where member-driven councils decide upon a scope of work and tackle the “pain points” of data exchange that they determine need to be addressed.
- c. In the past five years AgGateway’s membership has grown from 140 companies to more than 230 – and includes an impressive list of industry leaders – as businesses increasingly get on board to develop and implement connectivity solutions.
- d. Another reflection of this success is that efforts are now underway in Europe, South America and Asia to replicate AgGateway’s effective North American model.

Membership benefits list

- Improvements in how you share information with your customers, which may include improved accuracy, speed and ability to provide additional services.
  - Members report less manual data entry, better use of human resources, more efficient and accurate data management, better traceability and cost reductions.
- Strengthened relationships with trading partners at the table, and ability to forge relationships with potential new business partners as you implement solutions that enhance those relationships.
- The ability to shape new standards and processes to best fit your organizational needs.
- First access to emerging standards so that you will know how to leverage them for maximum benefit for your company.
- Access to Members-only resources to assist in implementing eBusiness:
  - Members automatically receive broader access to the Ag Industry Identification System (AGIIS), as well as a discounted subscription rate for full interactive use of the directory. The directory is a key resource for use in eBusiness.
  - Members receive access to guidelines, business rules, tools and other resources provided to our members to make implementation easier.
- Reduced costs for AgGateway Meeting registrations and one free registration to the AgGateway Annual Conference.
- Companies that are not involved risk missing out on decisions that could impact their ability to exchange information in future with key customers and other trading partners.

AgGateway Testimonials

[Consider this as a repository – we wouldn't necessarily use all of these.]

“The rapid changes in agriculture are occurring on the back of data and technology. The work AgGateway is doing today to identify a strategy and roadmap for tomorrow is critical. The role AgGateway has played has been critical in creating efficiency between trading partners. We have the opportunity to leverage this strong foundation to help drive the future of agriculture.”

“AgGateway is the only place with a mission to [electronically] connect our industry for the benefit of our industry. The diversity of member companies provides an immediate network. Join to make a difference and be committed once you join.

- **David Black, SVP and CIO, CHS Inc.; and AgGateway Chair**

“The connectivity projects allowed Syngenta to communicate with our trading partners more efficiently and accurately. We have seen internal efficiencies as well, due to decreased manual processes and EDI transactions. It has enabled Syngenta to become a better trading partner. Participation in the development of council strategy and goals enables Syngenta to influence the future of the council as well as build our internal portfolio.”

“AgGateway is a powerful voice and can effect positive change for the industry... The networking opportunities are fantastic – I have met many different people, all who are willing to share knowledge and contribute to a great organization.”

“The best way to learn is to dive right in! Participation in AgGateway has numerous benefits. The most powerful is the ability to influence the ag industry and help to shape and drive our future.”

“We're ultimately helping the grower...anything we can do to help the grower do their business better, faster...and if that means they're able to make transactional statements with their dealers, that's helpful to everyone.”

- **Lori Edwards, Commercial Business Process Consultant, Syngenta**

“In terms of getting involved in AgGateway...To borrow a marketing phrase from another company, ‘just do it’. The opportunity to gain an industry level perspective beyond what you have within your own company is invaluable. The ability to network with other industry companies and individuals also tends to allow us all to be more efficient – we just know who to call to handle any issues. It is meaningful work and much of the time shapes how the industry will do business more efficiently in the decades to come.”

- **Dave Surber Owner, Headwaters Business Solutions Inc.**

“SSC has been a long-term member of AgGateway. Participating in AgGateway has increased my appreciation of the agriculture industry and the need for eBusiness throughout to streamline not only back-office functions but also deliver business value to all points of the supply chain.”

“Come to the Annual Conference – it’s the best way to get immersed in the excitement and work that goes on with AgGateway, along with having the broadest outlook on what’s ahead of us all in the industry.”

- **Karen Thomas, VP, Information Systems, Southern States Cooperative (SSC)**

“I would highly recommend involvement in AgGateway if you want to be on the leading edge of what is happening in our industry. The accomplishments of AgGateway today will most likely help shape the standards for tomorrow. In the big picture, AgGateway will also help develop global standards.”

“The information highway is here, and we all need to take advantage of the opportunities. All the AgGateway projects, committees, and councils that are trying to set standards for automation in our industry are very important. The agriculture industry needs to be using the same data, the same identifiers, and the same language to be able to communicate back and forth with the suppliers and ultimately the end users, which in our case is the producer.”

“Since joining the Seed Connectivity project, we are doing more of the delivery/bill of ladings on seed electronically. River Valley Cooperative no longer hand-enters these transactions, which saves time and reduces the possibility of human error. We also support the use of industry standards when it comes to eBusiness, as this is the only way we as an industry will be able to move forward with eCommerce.”

“One thing that has impressed me the most is the quality and number of big name companies that are actually collaborating together to make our industry better in the future. In addition, we all benefit from the new members that join AgGateway every year. The ability to network with the current and new participants, share ideas together, and come up with solutions that work for everyone has specifically benefited me.”

- **Randy Beard, River Valley Cooperative**

“AgGateway provides a forum for consensus, to vet ideas, and to challenge one another about what is the best approach.”

- **Scott Nieman, Land O’Lakes**

“Technologies are advancing... we’ll see infield robotics that will change the very nature of how farming is done, but all these advances are data-driven. The underlying driver is the data.”

- **Bruce Blitch**

“In terms of the new Specialty Chemical Council, I look forward to the benefit all distributors and manufacturers will get out of having set data standards. This will provide more accuracy and timeliness in our rebate payments along with better working relationships between the manufacturers and the distributors.”

“Join AgGateway to have a voice working through ideas to improve industry processes, setting standards for all of us to benefit from and having an enjoyable opportunity to work with peers, customers, vendors and even your competitors. Working with these people toward a common goal that benefits the industry is a priceless experience.”

**- Sarah Moster Manager of Business Analysis and CRM for BASF**

“For us, AgGateway opened the doors to new opportunities and partnering internally. The first AgGateway integration that went live saved our company \$25,000 a year.”

“Often IT/eBusiness departments work in the back scenes without a lot of exposure. Over the years, the roles have changed to partner with business users and other companies. AgGateway has allowed these two worlds to come together where each has a voice in making improvements that benefit all. It is exciting to participate with a group of individuals and voice my expertise in an area that I am passionate about.”

“It is important to receive input and involvement from a variety of people for ‘electronic enabling’. We’re looking for ways to integrate with companies faster, easier and more efficiently.”

**- Tammy Creswell, Simplot, IT eBusiness Manager (Crop Nutrition)**

## Ag Retail

- There have been major advances in resources to aid Ag Retailers in terms of seamless electronic exchange of data. By being a part of AgGateway, ag retailers can take full advantage of these tools to increase your productivity, efficiency and customer service.
- Standardized Sales Reporting Format: AgGateway's Ag Retail Council has created a standardized format for reporting to multiple companies. The format can be used for both excel and XML reporting.
- Open Access to Standard Identifiers: An exciting new enhancement to the Ag Industry Identification System (AGIIS) allows anyone in the industry to have automated web access to the standard identifiers used in electronic business transactions. Access and limited searches are free; fees accrue once a user exceeds a certain number or level of searches, while manual, web-based look-ups are free and open to all. This will bring the ag industry closer to having globally applicable standard identifiers, which will greatly increase data quality and provide more efficiency for all trading partners. Most other major industries have already achieved this uniformity that is the basis for electronic transactions.
- Auto Identification Data Capture (AIDC): Nothing is more central to the effectiveness of a supply chain than the ability to collect and transmit accurate, actionable and timely data. Automating workflows with AIDC technology – used in barcoding and other applications – provides this level of real-time efficiency, accuracy and connectivity. AgGateway's AIDC Task Force is making it easier for Ag Retailers to adopt AIDC, with multiple resources and expert sources.
- Compliance Reporting: Advances in eBusiness efforts are making it much easier for Ag Retailers to comply with regulatory requirements, including reporting under the Responsible Ag Initiative, Paperless Fertilizer Tonnage Reporting, and more.
- AgGateway's Ag Retail Council is helping ag retailers leverage other opportunities within AgGateway to improve connectivity. Many retailers have used the Seed Connectivity Project to the lasting benefit of their businesses. Precision ag is another important area where retailers will benefit from solutions regarding work orders and field prescriptions.

Ag Retail Testimonials

“Our involvement in the Seed Connectivity II Project came along at the perfect time for our company, as we were having tremendous growth in our seed division. SSI’s involvement with SCII made our implementation much easier. It was exciting to be part of the decision-making process working with all the many participants. I’m proud to be involved in the Ag Retail Council and seeing the growth of our members.”

“Continuing to get the industry to use the same identifiers and simplify data exchange is extremely important. One of the great things about AgGateway is it provides a place for retailers, distributors and manufacturers to have an equal voice at the table as decisions are being made.”

“Networking with other companies has allowed us to brainstorm and solve internal projects. Hearing ideas and solutions from others always gets the ideas flowing.”

“Get involved in AgGateway. The skills and experience you have will become important in decisions made within committees, projects and councils. You will get to know a great bunch of people with a wide variety of backgrounds. Driving the industry to the point where everyone is connected on all levels should be the goal for all of us.”

- **Jeff Griffeth, Co-Alliance LLP**

“Using AGIIS unique identifiers and AgGateway standardized message formats means our systems are more automated, accurate and timely– that allows our people to focus on serving our customers.” – **Randy Fry, Ceres Solutions**

“Southern States has realized phenomenal savings using B2B processing and Global Location Numbers (GLNs) to handle our seed invoicing... Today seed invoices are processed within days of shipment... [T]he data being passed between business entities is of consistent and reliable quality when based on the use of the GLNs.” – **Bob Whitty, Southern States Cooperative**

“The Global Trade Item Number (GTIN) lookup in AGIIS eliminates the need to contact the manufacturer for each GTIN that we might be missing when it comes time to send Product Movement Reports. This is a huge time savings....” – **Ann Vande Lune, Key Cooperative**

[Sales Format] “This is a fantastic new resource, and one that every company should consider putting into place. It’s easy to set up and will save ag retailers countless hours and headaches in the months and years ahead.” - **ARA President and CEO Daren Coppock**

“By adopting this standard, we expect to reduce manual data entry and see fewer errors in our sales reporting – resulting in labor savings, time savings and a faster turnaround on our rebates. We know many others are putting the file format in place, which will greatly improve the ease of information exchange between trading partners.” - **Jeff Griffeth, Innovative Business Solutions Manager, Co-Alliance**

“Putting these electronic connections in place saves so much time. We can just import the information – with no need to hand-type the Bill of Lading, etc. With invoices and product movement reports, GROWMARK has created an internal clearing house – it stops a lot of errors from entering the supplier’s system. We’re now working on bookings-to-order and testing. This will create the order in the seed vendor’s system automatically. We can even create the delivery ticket to the farm right off that same information. During the busy season this allows people to focus on their business and not worry about paperwork. There’s also significant improvement in keeping tabs on inventory.” - **Jordan Kuhns, GROWMARK**

“We’re able to connect with two major seed manufacturers and are testing with third on PMR (product movement reporting),...and price sheets. We’ve cut entry time by two-thirds -- Push a button and it’s there accurately. Inventory control has doubled. The price sheet has eliminated mistakes. Sales people and management have confidence that they have the right price, because it comes directly from the manufacturer’s system. Invoices are automatically entered into the system and prices are populated. The accounting staff is happy because it helps with accuracy of financial statements. The warehouse guys know what’s out there and that they will be able to find it. On PMR, what used to take days to key in is now done within minutes. We’re able to electronically push sales to the manufacturer, and we’re getting GTINs from ship notices so the ones going out are the same. We’re continuously updating the system with correct information. Next step is order-to-booking; we hope to implement with one major manufacturer soon.” - **Ann Vande Lune, Key Cooperative**

“We’ve streamlined the data transmission between the manufacturer and retailer. Going electronic removes human error, and the data can pass along faster with higher quality. As the whole industry unites and talks the same language, there’s much less effort to translate the data from retailer to manufacturer. Winfield will soon be setting up price sheet, inventory and ship notice connections with two more manufacturers. For the PMR, we have one retailer connected and are planning more. Industry-wide, we see these improvements leading to better communications, which will allow precision ag to be put into place more easily. Everyone can read the data.” - **Tingshien Fan, WinField/Land O’Lakes**

## Crop Nutrition

- Using AgGateway standards, eConnectivity has been achieved between many trading partners within the crop nutrition, seed, crop protection, feed and grain and other agriculture segments for contracts, ordering, shipping and invoicing.
- Companies report these benefits: more accurate reporting, fewer manual errors, better inventory management and smarter resource allocation.
- One project of strong interest within the crop nutrition sector is the Paperless Fertilizer Tonnage Reporting initiative. Lack of a standardized approach to tonnage reporting throughout 47 states has been an administrative burden for both companies and state governments. Thanks to this initiative, five states are now accepting live data, and many more are interested in getting engaged.
  - Paperless Tonnage Reporting Project - working with The Fertilizer Institute, Ag Retail Association and the Association of American Plant Food Control Officials to create paperless tonnage reporting.
- The Crop Nutrition Council is working on expanding connectivity and efficiencies in the crop nutrition sector.
  - Values Added Team (VAT) has designed promotional packages for council's access to share and promote eConnectivity with AgGateway members or non-members – includes value flyer, contacts & capabilities, connectivity value tool.
  - Task Force Connectivity Team – to assist with connectivity issues, escalate issues to the Allied Providers Council and to develop a “best practice” process.

### *[More detailed:]*

- The Crop Nutrition Connectivity Project uses proven standards to transmit contract-to-invoice messages. Some of the benefits members report:
  - Implementing the AgGateway standards has allowed us to add new eBusiness customers that we otherwise may not have added.
  - After connecting with one trading partner using the standards, adding additional trading partners is much easier and rapid.
  - Our time to complete and confirm a phoned-in customer order is normally in the neighborhood of 3 to 5 minutes. For customers in the AgGateway Crop Nutrition Project, that time is effectively zero when no errors are encountered in the electronic order.
  - Automatically notifying trading partners when adding an entity in the Ag Industry Identification System (AGIIS) allows us to place orders to a new ship-to address in minutes without requiring phone calls.

- We can transmit the details of remittance payment electronically for easier, more accurate and quicker reconciliation of accounts payable and accounts receivables.

*Crop Nutrition Testimonials*

Fertilizer Tonnage:

“The project benefits the industry and states with efficiencies that will improve accuracy and timeliness of reports.” - April Hunt, Michigan Department of Agriculture

“We’re projecting lowered operational costs and more productive resources. We look forward to all our partners, peers and reporting agencies participating in this process.” - Bob Whitty, Southern States Cooperative

### Crop Protection

- Thanks to eConnectivty efforts in crop protection – many of them achieved through work at AgGateway – up to 70% of invoicing and 97% of sales reporting is now electronic.
- Companies report these benefits: more accurate reporting, fewer manual errors, better inventory management and smarter resource allocation.
  - Some have reduced their customer service departments and reallocated their resources appropriately.
  - Many indicate better regulatory data in the value chain (lot or batch numbers, asset identifiers, etc.).
  - Established infrastructure for auto ID and data capture (bar code/RFID), traceability and just-in time inventory.
  - Distributors save so much time with electronic price sheets that one distributor indicated they save approximately 300-400 manhours per year with electronic price sheets; they hoped the AgGateway standards would be used throughout the industry.
- The Crop Protection Council is working on expanding connectivity and efficiencies in the crop protection sector.

We are currently working on:

- Improving our product data in AGIIS to better prepare for bar coding implementation.
- Developing an implementation plan to resolve the issue of multiple GLNs in a single warehouse (issue brought to us by a member).
- Discussing how to manage line-item rejections on an Order Response (again, brought to us by a member – demonstrates the ability of Councils/Committees to work together to resolve issues).
- Collaborating with other councils on AIDC and Ag Retail reporting.

Crop Protection Testimonials

“United Suppliers (US), began using B2B with XML messaging soon after the industry started. This has allowed us to triple the size of our crop protection business and not increase our administrative staff. We went from \$400 million in CP sales to \$1.3 billion in seven years. Today we have four people who do all the purchasing, as well as handle all the distribution activities for our 31 distribution warehouses. We have three people who do all of our customer invoicing, and two people who handle all the costing and accounts payables. All of the efficiencies we enjoy today are either directly or indirectly attributable to the electronic B2B system.”

“Beginning with purchasing, over 80% of our dollar volume is transacted electronically. One of the advantages that this affords us is the improvement of internal business processes, including auto-notifications and the ability to track shipments. On the payables side we have gained internal efficiencies and accuracy as well.”

“The majority of the processes accomplished thru the B2B system are routine. This allows our people to focus on our customer and supplier relationships. In conversations with many of our electronic trading partners they have conveyed many of the same stories. In short, we would have to at least double our staff, and suffer timeliness and accuracy if we were to conduct our business any other way.”

- **Dave Hoyt, United Suppliers**

“Through connectivity we’ve experienced:

- Preferred partnership - Our trading partners appreciate doing business with us more due to how easy and capable we are to work with;
- Speed/Efficiency - Less time wasted back and forth on the phone and sending e-mails;
- More robust & accurate data - You’re able to transmit significantly more information than someone would bother mentioning on the phone or via e-mail, not to mention that we’re able to immediately import the data we receive into our own tables and serve it up in our own easy-to-understand format for our users.”

- **Nick Wantoch, CP&S Systems/Business Analyst, United Suppliers**

“Connectivity with our trading partners has given us ability to move large amounts of data more quickly and more efficiently; Normal, mundane processes are done electronically, freeing up valuable human time; and the ability to move data at almost any time – not relying on ‘normal business hours’ or delivery hours. I can’t put it into dollars, but we have been able to double-fold our number of purchase orders processed without doubling the work force. Also, record retention and accessibility is much easier and more flexible.”

- **Kay Campe, IS Manager, Rosen’s, Inc.**

## Grain & Feed

- Today, transactions for millions of bushels of grain are passed between buyers' and sellers' systems without manual intervention:
  - Scale tickets and grade information on receipt and shipment of grain;
  - Futures trade orders and confirmations;
  - Movement of grain from one location to another.
  - Also, within companies to transfer grain movement information from one system to another.

These AgXML standard messages are housed by AgGateway, where they are free and open for any company to use.

- Benefits of eConnectivity include:
  - Reduction in manhours handling and inputting contact documents
  - Reduction in errors from entering data multiple times in various systems
  - Synchronization of data for accuracy supports timely, strategic business decisions
  - Systems without any human interventions include Scale tickets and grade information; and commodities tickets
- AgGateway's Grain & Feed Council is working on additional steps to promote, enable and expand eBusiness in the Grain sector. In a collaborative effort, companies in the grain industry are considering ways to enable the exchange of Contract information and/or Settlement information between companies; and promoting education of existing, available messages to the wider industry.
- Because of federal and state regulations, information required for concerns in areas like crop yields and air quality will only increase.
  - The USDA has adopted the AgGateway schemas, adding to industry efficiencies in reporting.
- SPADE CART project.... [provide planned benefits to participants]

## Grain & Feed Testimonials

“AgGateway is all about collaboration. It does not matter what size company you are with, everyone has the same say.” – **Mike Thronson, Application Development Team Lead at Heartland Co-op**

## Precision Ag

- If you're working in the area of precision agriculture, you need to be part of AgGateway.
  - PrecisionAg magazine called AgGateway one of the Top 15 organizations to watch in 2016.
  - PrecisionAg Editor Paul Schrimpf has noted this year (2016) that "...[AgGateway's] ADAPT Toolkit shows remarkable progress by a dedicated group of folks, and as much promise as we've ever seen as far as getting to that magical place where everything talks to everything else."
- Making precision ag technologies work in smarter ways for producers and their advisors is more important than ever in agri-business today, where the focus is on productivity, efficiency and cost savings.
- AgGateway is the forum where essential dialogue and work fueling improvements in precision ag are taking place.
- AgGateway's Precision Ag Council, which consists of more than 100 member companies, is developing ways for growers and service providers to better manage valuable data used in field operations, precision water management and telematics.
  - The result will be that growers and their trusted advisors will be able to securely exchange data collected through growing season and transform the data into actionable information in Farm Management Information Systems (FMIS) and other tools.
  - These improvements also facilitate crop insurance and compliance reporting.
- AgGateway's new ADAPT (Agricultural Data Application Programming Toolkit) eliminates a major barrier to the broad use of precision ag data, by easily enabling interoperability between different software and hardware applications.
- Our members forge new and lasting relationships with customers and other trading partners by participating in these initiatives.
- AgGateway's Precision Ag Council is collaborating on ways growers and service providers can better manage valuable data used in field operations, precision water management and telematics.
- The end result will be that growers and their trusted advisors will be able to securely exchange data collected through growing season and transform the data into actionable information in Farm Management Information Systems (FMIS) and other tools.
  - These improvements also facilitate crop insurance and compliance reporting.
- AgGateway's SPADE and PAIL family of projects has targeted the problem of interoperability, and developed the ADAPT toolkit, which will help convert seamlessly between various manufacturers' data formats and an industry standard common data model.

- The Standardized Precision Ag Data Exchange (SPADE) Project is a collaboration among agricultural suppliers of hardware, software, inputs, services, implements and vehicles for improved data exchange and interoperability. It targets field operations of seeding, tillage, fertilizing, spraying and harvest to maximize the value of precision agriculture through seamless and transparent data exchange.
- The third phase of the Standardized Precision Ag Data Exchange Project (SPADE) is comprised of more than 30 organizations focused on implementation guidelines of the work of the first two phases of SPADE.
- Precision Ag Irrigation Leadership (PAIL) Project's purpose is to enable the growers management system to electronically communicate with their irrigation technologies by providing a common set of data standards.
  - The PAIL data standards exist to support integrated irrigation solutions by making it easier to request and receive relevant data from a variety of equipment, manufacturers and data servers.
  - PAIL data standards provide three main benefits for participating companies:
    - Financial Benefits: By reducing the time and effort currently required of growers to interact with multiple vendor products, vendors increase the likelihood of purchase of their irrigation products and services by removing the barrier to growers of having to learn multiple data systems.
    - Technological Benefits: Vendors can enable their equipment or software to interact with an irrigation application without having to rewrite specific code every time a partner's software program or application is changed.
    - New Market Opportunities: Working in partnership or in short-term alliances, vendors can create new market opportunities with data-driven products and services.

Precision Ag Testimonials

[Also Patrick Sanders and Jeremy Wilson on video]

“Precision agriculture technology has evolved to an enormous extent. Today, the transactions involved to get variable rate applications are very data-intensive, and involve many more people, many more participants in the this value proposition. It can include the seed supplier provider special services, the implementing companies, the U.S. government requiring reporting. These transactions are getting very complex, and SPADE has focused on making them easy by focusing on common reference data and also on data standard formats, and the ability to move this data from person to person, throughout agribusiness.” - **Joe Tevis**

“SPADE continues to be one of the most productive and exciting activities in precision agriculture today. We are already seeing applications in the field benefiting from these seminal efforts, with much more to come. As these changes are implemented, growers in the U.S. and around the world will be able to better manage their data from field operations, with huge potential benefits in terms of their ongoing productivity and profitability.” - **Jeremy W. Wilson of Crop IMS**

“This is the year we will finally have a solution to interoperability, which has been a formidable hurdle to the use of precision ag technologies. ADAPT represents a monumental amount of work over several years, by a lot of people. Now we're alerting software companies that it's time for them to develop the 'plug-in' technology on their ends to facilitate broad industry adoption.”

- **ADAPT Committee Chairman Mark Stelford, General Manager of Premier Crop Systems**

"Widespread acceptance and use of the new ADAPT framework will reduce our effort and frustration greatly. The as-is state of precision ag data management is frustrating to say the least. It's gotten to where we will only buy and recommend a couple of machinery brands to our growers, because we know how to deal with the data from those machines. Firmware upgrades in the equipment change data formats so they no longer import into our software and we end up waiting on the equipment company and software company to get together and fix it."

– **Luke Lightfoot, Ag Technology Manager at Co-Alliance, LLP, an Indiana ag cooperative**

[PAIL]

"How we manage water is a huge consideration in agriculture today. We are moving toward publication of these standards, which will be a major step forward in precision agriculture. As the standards are implemented, growers will be armed with greater ability to make smart irrigation decisions. Systems that use the PAIL data standards will make efficient practices more understandable and simplify the way data is moved around the web."

– **Aaron Berger, Software Engineer at AgSense, and Chair of the PAIL Project.**

“I'm looking forward to the day when I can easily extract accurate data and make rapid, informed decisions about watering our crops.” - **Roric Paulman, Paulman Farms, Nebraska grain farmer**

## Seed

- Using AgGateway standards, eConnectivty has been achieved between many trading partners within the seed, crop nutrition, crop protection, feed and grain and other agriculture segments for contracts, ordering, shipping and invoicing.
- Companies report these benefits: more accurate reporting, fewer manual errors, better inventory management and smarter resource allocation.
- A key area of interest for seed suppliers and ag retailers is Auto Identification Data Capture (AIDC). Nothing is more central to the effectiveness of a supply chain than the ability to collect and transmit accurate, actionable and timely data. Automating workflows with AIDC technology – used in barcoding and other applications –provides this level of real-time efficiency, accuracy and connectivity. AgGateway’s AIDC Task Force is making it easier for ag retailers to adopt AIDC, with multiple resources and expert sources.

## Seed Testimonials

“Implementing Ship Notices from the Seed Connectivity Project at Heartland is an accomplishment that I am proud of. Being involved in a large project like Seed Connectivity II has allowed me to pick up a lot of information...Because of the Ship Notice process, we have been able to increase the accuracy of inventory during the receiving of the product.”

– **Mike Thronson, Application Development Team Lead at Heartland Co-op**

“I am proud of the work we’ve done on the Seed Connectivity project. Our company now can receive product into our accounting system electronically, which can be priced without any hand-entering of information.”

“I am excited about the progress of the Auto Identification and Data Capture (AIDC) working group. Our company has used barcoding in our seed business for several years, but it was not incorporated into our accounting system. Now we have incorporated it into our system, and the AIDC group is working hard to standardize barcoding in the ag retail industry. I hope soon we can implement barcodes in all of our retail agronomy business. We know from past experience that barcoding can improve accuracy and speed up our work flow.”

“AgGateway has given me the opportunity to meet people that work throughout the ag supply chain who understand the inefficiencies, and the opportunities that exist to improve our business. I have gotten a better understanding of the other industry segments and have built a working relationship with many people. I like having that face-to-face knowledge of who you are working with in your daily activities... AgGateway gives you the opportunity to meet and work with great people from the ag industry, where your time and effort is needed and appreciated. You will learn about the eBusiness world within agriculture and take home knowledge to help your own business.”

**- Randy Fry, Ceres Solutions**

Specialty Chemical

- This new AgGateway council is addressing pain points related to the exchange of business data within the specialty chemical industry, and will collaborate with industry partners to implement standards and guidelines that provide timely, accurate and standardized data.
  - Segments covered include professional vegetation management, pest control services, and turf and ornamental, as well as subset segments such as aquatics and forestry.

Specialty Chemical Testimonials

“As with crop protection, we want to use best practices and set standards for efficient data exchange, in a way that meets the unique characteristics of the specialty chemical business,” said the council’s new chair. Electronic standardization and coding on products will enhance the accuracy and timing of billing and payments to distributors while also reducing complexity within the industry. Reducing complexity will solve pain points for everyone, improve efficiency and save money.”

“Setting sales reporting standards is very important. This reduces complexity and provides efficiency for all parties to benefit from. Most of us today are facing the challenge of working on more things with fewer people, and we need resources like AgGateway reporting standards to help us accomplish these types of changes.”

– **Sarah Moster, Manager of Business Analysis and CRM for BASF**

### Allied Providers

AgGateway's Allied Providers are product and service suppliers who serve as advisors to AgGateway members on new implementation processes and technologies.

They also:

- Help to shape future standards in agribusiness.
- Provide guidance on cutting edge standards and capabilities in software products and services.
- Conduct/facilitate educational/workshop activities in support of AgGateway's goal of educating the members in the techniques and benefits of eAgriculture.
- Form working groups to explore new technical solutions and processes.
- Provide the "Enabled by" branding and logo for software and products to help showcase the benefits of AgGateway standards.
- Provide a searchable database of Allied Provider members who provide services such as connectivity, data cleansing, barcoding/RFID, sales reporting, and many other services.

...the rapid change in Information and Communication Technology (ICT), and the possibility of lending a voice to the adoption of ICT in the ag supply chain – from barcoding, to sensor/satellite data; from data exchange with trading partners to collaboration portals for the value chain.