Enhancing standards in supply chain visibility for the crop protection industry
The CRISTAL standards and guidelines were initially designed to enable electronic commerce in the agro industry.

The new release of CRISTAL provides state of the art technology to reflect changes and requirements in crop protection and seed business globally. Enhancement of these standards allows the implementation of a full supply chain visibility helping to significantly improve product safety and stewardship and providing new services.
CRISTAL standards optimise supply chain transparency

Tracing and tracking of crop protection products and seeds enables a clear documentation of the product flow from production through the distribution channel to the end user. Product coding standards ensure creation of unique machine readable codes (e.g. 2D codes) placed on sales units and logistics items containing all relevant information. By reading these codes when items are shipped through the distribution channel and adding this shipment information to the item specific data records, detailed item flow documentation is created to optimise transparency. This transparency delivers benefits to crop protection and seed business and related activities. CRISTAL standards bring an abundance of benefits:

• Enhance Total Quality Management
• Support supply chain agility from production to end users
• Reduce product obsolescence along the distribution chain
• Improved product data accuracy and ability to acquire it
• Creates new opportunities in Customer Relationship Management
• Improved product safety
• Helps farmers to use only registered crop protection products in the right quality and protecting against use of illegal products with unknown contents – an important step to produce safe and healthy food
The new release aims to support the crop protection and seed businesses. Current and future requirements are taken into account in a global approach. Compatibility with the requirements of other markets in which the basic manufacturers operate is important. Therefore the CRISTAL team aims to establish strong links with similar initiatives worldwide for harmonised standards.
CRISTAL - A standard open to all

CRISTAL is based on global standards (GS1 and UN/CEFACT) which ensure consistency, sustainability and high flexibility to meet specific needs. It covers all levels of traceability as product, batch, sales unit and finally logistics level. It allows for all those involved in the supply chain to exchange data using a common language.

CRISTAL standards include:

- Documented standards for the use of machine readable codes and labels on sales units (such as an individual bottle), traded units (such as a case), and logistic units (typically a pallet)
- Documented standard electronic data interchange messages fitting within an overall electronic communication set
- Communications material for use by National Associations and within individual organizations
- A statement of potential benefits from the implementation of CRISTAL standards

CRISTAL standards are supported by ECPA and are open to a broad audience.

Basic principles of CRISTAL are:

- The standard is open to any organization
- Competitive advantage comes from information content, not the technology standards or infrastructure
- Sharing knowledge and experience is entirely voluntary
- The industry is committed to conform to the CRISTAL standard
- The pace of implementation will be at the discretion of each individual organization which must also justify its own investment

For more information on the Cristal project, visit www.ecpa.eu
The European Crop Protection Association (ECPA) represents the crop protection industry at the European level. Its members include all major crop protection companies and national associations across Europe.

ECPA promotes modern agricultural technology in the context of sustainable development; to protect the health of humans and the environment, and to contribute towards an affordable healthy diet, competitive agriculture and a high quality of life.

ECPA members support fair, science-based regulation as a guarantee to the consumer and the crop protection user, of high standards and safe products.