

PRESS RELEASE

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AEF sets up two new project teams

The advancement of electronics within the context of ISOBUS and the corresponding demands of the industry have prompted the Agricultural Industry Electronics Foundation (AEF) to set up two new project teams to deal with issues they are facing: Wireless Infield Communication and High Speed ISOBUS.

Wireless Infield Communication

Wireless communication in agricultural engineering includes close-range data transfer between machines (M2M), directly in the field. Using a secure and standardized radio communication system, machines can control each other or simply exchange status information. For this purpose, the process data, such as position, speed and fill level must be exchanged directly in-field, at one-second intervals.

If this information is always up-to-date, the processes can be more controlled and stress-free.

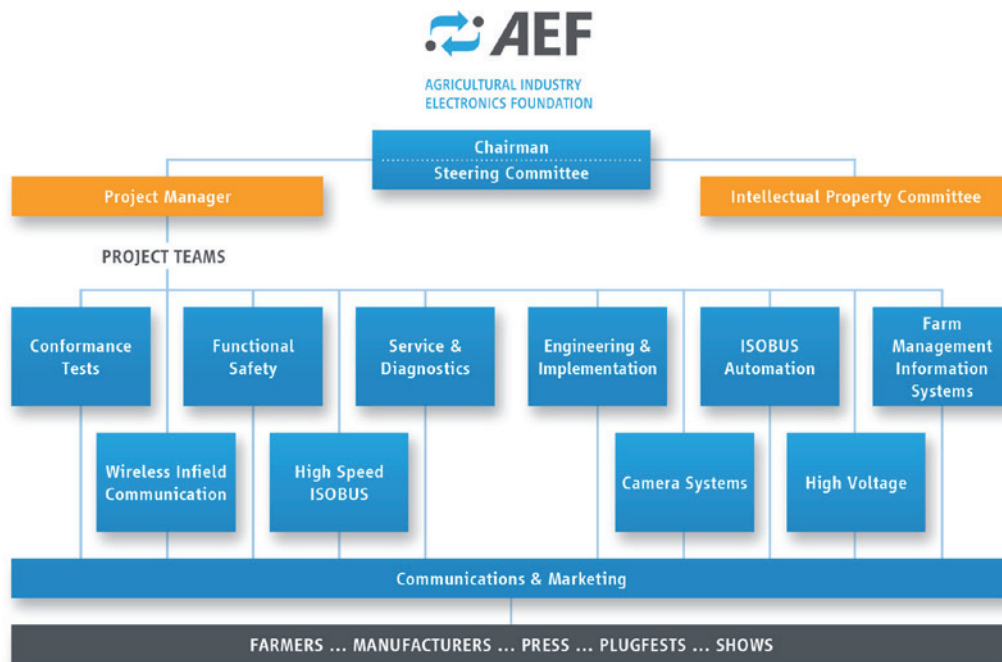
To this end, the Wireless Infield Communication project group will not only select the suitable radio standards (WLAN, etc.) but also examine encryption and functional reliability.

Furthermore, the desire for wireless communication is an almost logical consequence of AEF's successful work on Farm Management Information Systems (FMIS). In the meantime, standardization has developed so much in the corresponding project group that the question arises again about how data is transferred between the tractor/universal terminal and the office computer. Until now, it was necessary to use USB sticks or memory cards which, in practice, is considered inconvenient.

High Speed ISOBUS

Increasing demands on the quality of interaction between the driver and the tractor-implement combination, as well as the ever-increasing efficiency and process orientation in agriculture, mean that an extension to the ISOBUS standard is necessary. The AEF "High-Speed ISOBUS" project team is working on concepts for increasing bandwidth in the bus, in order to meet the increasing demands on data communication. With the implementation of specific protocols, the team will also create preconditions for the integration of new functionalities and assistance systems, such as the expansion of diagnostics, the support of electric drives, M2M (machine to machine) communication as well as the connection of real time video systems. Another fundamental aspect of the work is improving the graphic display on the screen, in order to make the systems more user-friendly. The high speed ISOBUS will certainly be backwards compatible, so that current ISOBUS systems will also be able to communicate through it.

With currently more than 170 member companies worldwide, the AEF has gained a lot of experience in consolidating different approaches to find one common solution. As the industry's "round table", the Foundation will also standardize these new areas under its umbrella. To date, 14 companies are involved in the new groups.



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About the AEF

The Agricultural Industry Electronics Foundation (AEF) has been established as a "Round Table" of the ag industry by seven leading companies and two trade associations. The AEF makes the ISOBUS technology defined in ISO 11783 come to life. ISOBUS preferentially standardizes the communication between tractors and implements but also the data transfer between those mobile systems and farm management systems ensuring compatibility.

The voluntary association of today more than 170 companies from the ag industry and their suppliers has recently introduced a Conformance Test for the AEF ISOBUS Certification of tractors and implements. The results of the tests will be stored in the freely accessible AEF ISOBUS Database, www.aef-isobus-database.org, that can be used by customers and dealers to check compatibility of machinery. Also a certification label has been issued, which since Agritechnica 2013 marks AEF certified products. The AEF's success with ISOBUS has led to submission of additional subject areas to the association because it serves as a neutral "Round Table". Examples of these additional subject areas requiring certification are "Electric drives", "Camera systems" and "Farm Management Information Systems (FMIS)".
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