Agricultural Industry Electronics Foundation AEF

An Initiative of Agricultural Industry to foster Electronic Standards

Rainer Hofmann
Chairman AEF
Topics

- Why did Ag Industry found an organisation for electronics?
- AEF - organisation and objectives
- North American aspects
- Project teams and project scope
- Future
Electronic in Ag machinery --- last 20 years

- **Control** of mechanical systems
- Operator **Control** Interface
- **Control** Network
- Automatic **Control**
Electronic in Ag machinery --- next 20 years

- **Communication** between coupled Machines
  Control and Data Communication Interface
  'ISOBUS' (ISO 11783)

- **Communication** Machine to Management Systems
- **Communication** Machine to Machine in Fleets

- **Electric Power** (HighVoltage)
Agricultural Machinery Manufacturers have to communicate and to cooperate to make electronic interfaces compatible, reliable and beneficial for the customer
AEF – the Organisation

Agricultural Industry Electronics Foundation

- Initiative of agricultural manufacturer companies and their associations
- Registered as e.V. in Frankfurt, Germany

International organisation for implementation of standards in electronic systems in agricultural machinery
**AEF – the Organisation**

*Foundation Members* = Funding Members = Steering Committee

*) Krone is representing CCI e.V (Competence Center ISOBUS) and their member companies

**General Members:** more than 140 Members

- Machine manufacturer: 26
- System manufacturer: 23
- Supplier: 25
- Software Provider: 6
- Others: 34

Rainer Hofmann, AEF e.V., 14. June 2012
AEF – the Organisation

CHAIRMAN
Steering Committee

9 Project Groups
- Conformance Tests
- Functional Safety
- Service & Diagnostics
- Engineering & Implementation
- Sequence Control
- High Voltage
- Camera Systems
- Farm Management Information Software

Communications & Marketing

FARMERS.....MANUFACTURERS...PRESS......PLUGFESTS.......SHOWS
AEF – short History

2008

Small membership
No products

Founder Member Contribution

2011

>140 members
Multiple Product development almost completed

Founder Member Contribution

2012

Service & Diagnostics database launched
Conformance test launched
AEF require some full time “employees”

- Founder Member Contribution
- General Member Service Charge
- Database License fee
- Conformance test license fee
- Sales of guideline documents to non members
AEF – the Organisation

AEF does no standardization work but prepare technical concept and functionality

ISO committees do formal standardization

AEF takes care for full implementation of formal standards according to industry and their business processes
AEF – Service for Members

- Industry aligned **Guidelines** for agricultural industry how to implement electronic standards for **Marketing, Service, Engineering, Safety**

- Organisation of international and industry wide cross **Cooperation**: e.g. Engineering ‘Plugfests’

- International test and **Certification** processes

- **Information Platform** for dealers, service, customers: AEF ISOBUS database

- **Reconciliation** of IP and patents for industry standards
AEF – North American Aspects

- Engineering Organisation of AEF is well established in North America:
  e.g. project team E&I 'vice team leader'; NTTL plugfest

- Marketing and Communication of AEF is not well established in North America

- South America is a growing market for electronic applications in Ag machinery –
  expecting support from established markets like NA or EU; closer relations
  between South America and North America need a good representation of AEF
  in USA

- What is essential in Ag Industry Electronics in North America in the next future
  and is not covered by AEF?

- What should AEF provide for North America especially?
We need your involvement (!)

• Different users (customers) and markets – different demands – different requirements (?)

• Networking .... to cover complex subjects

• Worldwide compatibility of solutions

More Information:
AEF Contact: Ken Edwards, Secretary
www.aef-online.org
Tel # 414 298 4158
Thank you very much for your attention