

42 V PowerNet Battery Connection System Specification Workgroup

Chronology of Events

- Ford funded “Virtual Engineering Initiative” (VEI) formed in 1997. Initial members were Daimler Benz, Ford Motor Company, Motorola and Siemens with MIT as host/facilitator. Decision in Fall, 1998, to tie project into 42V.
- Comment during a battery panel discussion at the January, 1999, “MIT/Industry Consortium on Advanced Automotive Electrical/Electronic Components and Systems” (Consortium) that a standard 42V battery connection would be desirable.
- Decision reached at a September, 1999, VEI meeting to form a 42V battery connection workgroup co-chaired by Norm Traub of Delphi Automotive Systems and Tom Dougherty of Johnson Controls.
- Workgroup decisions
 - Because a global solution would be needed for all manufacturers, Consortium membership would not be necessary for membership in the Battery Connection Workgroup.
 - VEI and Consortium meetings would be used as a good means for communication of progress and receipt of feedback.
 - Communication workshops would be scheduled in combination with each Consortium meeting.
 - Workgroup meetings would be held monthly in the Detroit area with telephone/NetMeeting available for remote participation.
 - Workgroup meetings originally rotated among member companies. Lately, USCAR in Southfield, MI, has been chosen as a central, convenient location for meetings.
- Identified three tasks that needed to be accomplished
 1. Global connection system requirements
 2. Globally accepted design
 3. Process to generate a formal international standard
- Progress against three tasks
 1. **Global connection system requirements**
 - Requirements have been written based on input from responding companies
 - Not all companies have participated to the same extent
 - Challenge now is to obtain broad based acceptance of requirements

2. Globally accepted design

- Global design input must be received and a design drawing must be generated
- There is no precedence for this being done globally
- There is precedence for this being done regionally by USCAR in the United States
- Decision to ask USCAR if they would be willing and capable of coordinating a global design project under the direction of the 42V Battery Connection System Specification Workgroup
- Decision to ask EPC, a designer of connection systems for USCAR, if they would work with USCAR on generating the global connection design drawing
- Both USCAR and EPC have been instructed to take all global inputs into consideration in the design of the battery connection standard
- Consensus decision making on a global basis is difficult but not impossible

3. Process to generate a formal international standard

- A regional standards organization must submit a new proposal to the International Standards Organization (ISO)
 - Society of Automotive Engineers (SAE) is an accredited standards organization capable of submitting a proposal to ISO
 - SAE has agreed to form a joint workgroup between the Storage Battery Committee and the Connection System Task Force to develop an SAE specification that can be submitted to ISO for global acceptance
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- Norm Traub from SAE will continue to oversee this process and coordinate/communicate to all parties involved