



News Release

Safe-by-Wire Consortium

For Immediate Release

Contacts:

Mats Odman / Autoliv
46.8.58.72.06.23 (Sweden)
email: mats.odman@autoliv.com

Milton Beach / Delphi Delco Electronics Systems
765.451.0655 (USA)
email: milton.beach@delphiauto.com

Tanja Laube / Philips Semiconductors
49.40.23536.320 (Germany)
email: tanja.laube@philips.com

Dan Krenitsky / Special Devices
805.553.1382 (USA)
email: dan.krenitsky@mp.specialdevices.com

Mary McCall / TRW
248.426.5704 (USA)
email: mary.mccall@trw.com

Automotive Suppliers Form *Safe-by-Wire* Consortium to Create Safety Bus Standard

FRANKFURT, GERMANY and LIVONIA, MICHIGAN, USA (November 5, 2001) – Five of the world's leading automotive safety and automotive electronics companies announced today the formation of Safe-by-Wire, an industry consortium for the development of an industry standard automotive safety bus targeted for use in restraint systems.

The consortium represents a broad cross-section of automotive suppliers including Autoliv Inc., Delphi Automotive Systems (acting through its Delphi Delco Electronics Systems division), Philips Semiconductors, Special Devices, Inc. and TRW Inc., through its Automotive business. Autoliv, Delphi and TRW are recognized leaders in the automotive safety arena, SDI is one of the largest suppliers of air bag initiators, and

Philips Semiconductors is a leader in vehicle networking technology and one of the world's largest suppliers of semiconductors.

The Safe-by-Wire consortium has agreed to cooperate in the selection of standards for a sensor and deployment bus for the next generation of safety systems.

The consortium is open for anyone to join. Each company is allowed to participate as a contributor to or as a promoter of the specification without paying license fees or royalties. Members agree to work together to define the best overall bus solution to meet the unique requirements of a safety system.

Future safety systems will require numerous safety components and sensors, including adaptive air bags for driver and front passenger seat positions, knee bolster air bags, side impact air bags for all outboard seat positions, seat belt pretensioners, rollover air bags, seat belt buckle switches, side impact and under-hood crush zone sensors, weight sensors, occupant sensors and seat position sensors. By defining a standardized bus interface for the sensors and restraint components, crash sensor design may be substantially simplified, allowing rapid customization and reduced development costs.

The bus interface must be flexible enough to support all the various restraint functions and be cost effective and failsafe. Through the definition of a bus standard that meets these objectives, OEMs will realize the benefit of plug and play performance and the cost reductions that arise from economies of scale.

The proposed bus specification benefits from two years of prior work conducted by consortium members and other companies in the United States Council for Automotive Research (USCAR) initiative to develop a safety bus standard. The solution proposed by this consortium is a culmination of consortium efforts to distill the best technical approaches reviewed during USCAR safety bus meetings to define a solution that uniquely meets all the requirements for an automotive safety bus. As a result, rapid acceptance by OEMs and suppliers is anticipated.

The consortium has approved the initial specification draft and plans to publish the bus specification later this month. The consortium members are:

Autoliv Inc., with global headquarters in Stockholm, Sweden, develops and manufactures automotive safety systems for all major automotive manufacturers in the world. Together with its joint ventures Autoliv has close to 80 facilities with almost 30,000 employees in more than 30 vehicle-producing countries. Sales in 2000 amounted to US \$4.1 billion. For more information: www.autoliv.com

Multi-national Delphi Automotive Systems, headquartered in Troy, Michigan, USA, Paris, Tokyo and Sao Paulo, Brazil, is a leader in mobile electronics and transportation components and systems technology. Delphi's three business sectors – Propulsion; Safety, Thermal & Electrical Architecture; and Electronic & Mobile Communication – provide comprehensive solutions to complex customer needs. Delphi has approximately 198,000 employees and operates 198 wholly owned sites, 44 joint ventures, 53 customer centers and sales offices, and 31 technical centers in 43 countries. Delphi can be accessed at www.delphiauto.com

Philips Semiconductors, with revenues of US \$6.3 billion in 2000, is a world leader in silicon systems and standard products for wireless communications, digital entertainment, computing and automotive applications. The organization designs, develops and manufactures silicon solutions based on its innovative NexperiaTM architecture to create living technology for its customers building products, service providers using the products, and consumers enjoying the resulting products and services. For more information: www.semiconductors.philips.com.

Special Devices, Inc. (SDI) is a leading designer and manufacturer of highly reliable, precision-engineered pyrotechnic devices for the automotive industry. The company is dedicated to supplying its customers with products that meet their stringent requirements while maintaining the highest level of quality, reliability and innovation. SDI is a

privately held corporation whose principle shareholders are affiliates of J. F. Lehman & Company. For more information regarding SDI, contact 805.553.1200.

TRW Automotive is one of the world's largest suppliers of occupant safety systems, including air bags, seat belts, steering wheels, and electronics, as well as chassis systems. Its parent company, TRW Inc., provides advanced-technology products and services for the aerospace, information systems, and automotive markets. The company, which is celebrating its 100th year of operation, had 2000 sales of \$17.2 billion. Company news releases can be found at www.trw.com

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