

Active Safety Symposium 2014

The following topics are anticipated to be addressed in the presentations and the panel discussions being planned:

1. Active Safety Technologies and Countermeasure Development

Automotive suppliers and automobile manufacturers are vigorously developing and integrating advanced safety technologies in vehicles that have the potential to sense and prevent impending crashes and to reduce their severities. These technologies have tremendous potential to provide drivers assistance when needed in preventing crashes or in intervening autonomously on drivers' behalf in the event drivers fail to act on their own. Additionally, the information regarding an impending crash situation with respect to the closing speed, likely crash severity, occupants' restraint status, stature, gender and such other information obtained through sensors and cameras and the like could be integrated for future development of integrated active-passive safety systems. This will allow the development of occupant protection systems that are tailored to deploy to suit the safety needs of the occupants under specific crash conditions and scenarios. Presentations are invited to discuss the development of driver assistance and autonomous technologies for crash prevention, and integrated safety approaches, the safety problems, and crash scenarios that are specifically addressed, and their potential for safety improvement.

2. Integration of Active Safety Technologies in to Marketable Vehicle Product Lines

Automobile manufacturers are on the threshold of introducing many of the near-term active safety technologies in to their product lines. Some driver assistance products are already being sold as optional items in the upper-end product lines while others are waiting to see if any mandated requirements or rating schemes will emerge from the Government or ratings such as those introduced by institutions like the Insurance Institute for Highway Safety (IIHS) will be forthcoming. However, any voluntarily introduced features have to have a ready market and demand for such products to be viable. Manufacturers have to be concerned about customer acceptance issues, liability issues, product defect recall issues, reliability concerns, as well as costs and affordability for the customers at large. Automobile manufacturers, policy makers and safety advocates have to address these issues and devise solutions to the legitimate concerns of automobile manufacturers and others. Presentations are invited from all interested parties to address the issues raised under this topic.

3. Active Safety Countermeasures Testing, Evaluation and Assessment Criteria

Automobile manufacturers, suppliers, research institutions, IIHS, the National Highway Traffic Safety Administration (NHTSA) and several others are actively involved in testing countermeasure systems world-wide to assess the systems' safety potential. These tests involve defining various real world pre-crash and crash scenarios for different safety problems, development of test devices and test surrogates, test procedure development, and establishing test conditions and evaluation criteria. Other issues such as test repeatability and analysis of test results, and assessment of customer acceptance issues are also equally important in determining the usefulness of the active safety countermeasures. Additionally, the test results have to be translated in to credible real world potential safety benefits before claims regarding the technology systems can be made. Presentations are invited on the various topics listed in this section from all those involved in the testing and evaluation of active safety countermeasure systems.

4. Deployment Strategies for Active Safety Countermeasure Systems

The initial deployment of many of the significant passive safety systems became a reality through government mandated regulations. Further refinements of these systems have occurred through rating programs such as the New Car Assessment Program (NCAP) established by NHTSA, the ratings introduced by the IIHS as well as those brought about by the automobile manufacturers themselves. Government decisions regarding the deployment of many of the near-term active safety technologies they have already researched are pending while the research and testing is ongoing in many quarters including the IIHS as well as the industry and the government. Consumers and manufacturers alike have to find out from the real world operation of these technologies how well they meet their expectations. Further, if there are likely to be unintended consequences that too have to be determined prior to large scale deployment of these systems across many models. Credible estimates of the safety benefits can only be realized when promising technologies penetrate a significant portion of the vehicle fleet. Presentations are invited on the challenges facing the industry and others in deployment of active safety countermeasure systems, innovative approaches in lieu of mandated regulations, and the strategies that could be used to accelerate deployment. A panel discussion of the many issues involved will also be an interesting item to have at this symposium.