

SAE IntelliDriveSM Standards Leadership Workshop

September 29-30, 2009

Hosted at the Michigan International Speedway

Event Description

The purpose of this workshop is for relevant Standards Development Organization (SDO) committee members to come together to develop an end-to-end integrated IntelliDriveSM standards “roadmap”.

What is IntelliDriveSM?

IntelliDriveSM is a suite of technologies and applications that use wireless communications to provide connectivity that can deliver transformational safety, mobility and environmental improvements in surface transportation.

Standards workshop breakouts

Attendees will participate in a facilitated workshop environment to:

- Identify high priority areas for requirements and standards development
- Agree on individual SDO responsibilities and collaborative responsibilities of SDOs to address
- Develop a roadmap and timeline for meeting these responsibilities

Architectures: IntelliDriveSM Architecture is a bridge that spans the vehicle architectures for On Board Equipment (OBE) and the traffic control architectures for Road Side Equipment (RSE). In the US, 250M vehicles from sports cars to heavy trucks carry a wide range of systems that cannot be standardized. However, interfaces and message sets can be standardized with progressive benefits to highly equipped vehicles and high traffic management areas.

Nodes vs. Networks: A nationwide implementation of IntelliDriveSM must be sustainable over a long time similar to the deployment of the Interstate Highway System which began in the 1950s. In a similar way, the internet evolved as a set of distributed computing nodes that became networked over time. The success of these massive technology deployments may provide guidance to the development of IntelliDriveSM standards that enable progressive implementation models on vehicles and roadways.

Systems: IntelliDriveSM Systems are solutions to application “Use Cases”. Many Use Cases can be satisfied with a few performance driven standards with sufficient capacity to meet the requirements for the most stringent systems. Interface standards and sensor or component standards enable effective system solutions including service and maintenance considerations.

Secure Transactions: The security of IntelliDriveSM technical data and information is critical for safety and performance reasons as well as privacy and financial protection of internet type transactions from vehicles to RSE systems, i.e. tolling, parking, fueling, taxing, etc. New or existing standards addressing these requirements must be integrated into the IntelliDriveSM environment.

Certification: Certification of IntelliDriveSM products is critical because products from many sources must be certified for interoperability and interchangeability across vehicles and traffic controls. In the IntelliDriveSM environment certification becomes a distributed responsibility that needs very rigorous processes and practices. Closed loop standards processes provide one approach to develop certification solutions as part of the IntelliDrive standards development process.