To: SOS_RFI @nist.gov

From: SAE International

Docket: 0909100442-0563-02

Subject: **Standardization feedback for Sub-Committee on Standards**

SAE International, the leading Ground Vehicle and Aerospace Standards development organization (SDO), welcomes the opportunity to provide comment on the issues posed in the National Institute of Standards and Technology (NIST) Request for Information.

SAE International is a global society of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial-vehicle industries. SAE's core competency is voluntary consensus standards development.

With members in more than 100 countries throughout the world, the heart of SAE International's activity is the creation of consensus standards. Some 14,000 mobility industry experts donate time to serve on SAE International committees. SAE International relies heavily on its members' guidance and knowledge when developing standards.

SAE International has created 2,600-plus Ground Vehicle Standards for the automotive, construction and agricultural equipment, heavy trucks, buses and specialty-vehicle industries. More than 7,000 experts provide data for standards on critical industry issues.

In addition to Ground Vehicle Standards, SAE International's Aerospace Standards' repository includes 6,800 documents and is the largest such collection in the world. More than 7,000 industry experts provide expertise for aerospace standards.

SAE International is a non-biased global source of technical information that can be used by government decision makers as part of the process when formulating legislation or regulations related to safety, energy, and environmental issues in all forms of transportation. The information comes in many forms including peer-reviewed technical papers, workshop or symposia findings, technical standards, and cooperative research studies. The sources of the information include the best and brightest individuals from the private sector, academia and government both in the U.S. and throughout the world.

Examples of SAE activities include:

- SAE International develops more global aerospace standards used by the FAA and DoD than any other organization. These pertain to aircraft safety for design, maintenance and operations.
- SAE's global aerospace standards promote reduction of engine noise and emissions
- SAE is at the forefront of efforts to standardize detailed technical aspects of modern satellite-based air traffic management. SAE works closely with not only the FAA NextGen office but also with International Civil Aviation Organization (ICAO) and the European Single European Sky ATM Research Programme (SESAR) Joint Undertaking.
- SAE has developed standards to address measurement of fuel economy for hybrid electric vehicles.
- SAE has partnered with the U.S. EPA and the global automotive industry to research and select the next generation of refrigerants for mobile air conditioning systems.

- SAE International is working with NHTSA, industry and consumer groups to develop solutions for the interaction of electric or hybrid electric vehicles with pedestrians.

- SAE has recently published a group of standards involving Smart Grid interoperability including "J1772™ SAE Electric Vehicle Conductive Charge Coupler." Work continues on other standards in this area.

- SAE is working with other organizations and consortia such as ISO, IEC, utility companies, IEEE, EPRI, ZigBee Alliance, HomePlug Power Alliance, automotive OEMs and suppliers, and many others in the development of specifications and standards to address the requirements of the SmartGrid strategy.

- SAE International is a leading standards organization identified in the Phase 1 NIST Framework and Roadmap for SmartGrid Interoperability Standards paragraph 5.13 for "Interoperability Standards to Support Plug-In Electric Vehicles."

SAE International makes the following comments regarding federal agency involvement in standards development:

1) Establish standing, reoccurring meetings between SDOs and federal agencies. This will facilitate collaborative discussion on items of mutual interest such as standards opportunities, specific needs, and specific technologies. Though SAE International has been identified as a lead organization in SmartGrid interoperability standards development, the level of interaction between SAE International, NIST, the Department of Energy, and other federal agencies involved in the Smart Grid has been minimal with no formal meetings scheduled. SAE International welcomes the opportunity to meet on a regular basis with the federal agencies. This process will improve communication between SDOs and federal agencies allowing SDOs to focus their standards development activities to areas of greatest national interest and benefit.

2) Availability of NIST assets to SAE International and other standards development organizations (SDOs) for use in mutually beneficial cooperative research projects. SAE International does not own any test facilities and equipment and contracts these on an as needed basis. SAE International proposes that NIST and other federal agencies establish a streamlined process whereby SDOs can make use of federal testing assets (facility, equipment, staff) required for standards development.

3) Direct Funding of Standards Development Process. This includes not only the development of standards but also any testing that is required in the standard development process. SAE International is non-profit society that relies entirely on volunteers to serve on standards development committees. Any consultant fees, travel and other costs associated with standards development are funded directly by SAE International. As an example, ANSI has designated various SDOs as ISO Technical Advisory Groups or ISO Secretariats. As part of their ISO TAG and ISO duties, several of the Committee members are required to attend meetings in Europe but their companies would not underwrite their travel costs and SDOs do not have the funds to cover their travel costs as well. SAE International proposes that NIST investigate establishing a fund that SDOs can draw on for standard development related activities. To actively participate in the international standards harmonization and development process and continue to influence the world with US know-how, there needs to be a financial model developed with the help of US government agencies which protects US interests in global technical fora.

   In the Smart Grid area, SAE is not receiving any federal agency funding. SAE International would like to highlight the relationship that SAE International has with the Federal Highway Administration (FHWA) as a model of a SDO/federal agency co-operation. SAE International, along with several other SDOs, is currently under contract with the FHWA for standards development in the area of

Intelligent Transportation Systems. This technology, named IntelliDrive, has been identified as a key technology by the US Department of Transportation. The agency recognized that common standards were required in order for the technology to gain a market foothold and widespread implementation. Similarly, SAE International would like to see relationships like between SAE International and FHWA evolve between all SDOs and federal agencies.

4) Involvement of federal employees on standards committees. In spite of the direction given in documents such as OMB A-119, federal participation on non-government standards committees varies widely. Often this is a result of differing legal interpretations of federal regulations. Some agencies encourage their employees to participate, while others discourage it. A clear interpretation of pertinent federal rules that would encourage more consistent government participation would be very helpful, as it would strengthen the already effective partnership between SAE and federal agencies on so many aspects of vehicle safety, energy efficiency, and environmental responsibility.