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### **OBSERVATIONS REGARDING**

## The U.S. Model of Public-Private Cooperation in Standards Setting

- Underpins a strong, responsive system that is critical to sustaining competitiveness, technological innovation and economic growth.
- Provides flexibility to choose standards based on important considerations such as technical quality, market relevance and global coherence.
- Meets the needs of both government and industry for internationally accepted solutions.
- Provides for leadership of initiatives by both the private and public sectors.

# Contributions of Standards to Technological Innovation, Competitiveness, Trade

- Technology is increasingly infused into the systems and processes that make the world work. Standards are paramount to ensure the interoperability within and among existing and future systems of systems.
- Standards from all sources can lead to technological innovation.
- In all industries, standards are important tools for interoperability, production efficiency and global deployment.
- When technologies based on standards compete with each other for marketplace dominance, rapid innovation by one spurs competitive response by others in the market.
- Successful standards can help create opportunity for further product differentiation and more choices for users and consumers.
- The U.S. technology industry traces its competitiveness to the strength and broad acceptance of the standards on which it relies.

### **Federal Government Role**

- The role of the federal government has varied historically and needs to become more consistent and sensitive to its impacts.
- There needs to be a locus for developing standards related public policy at the national level. The bottom-up approach followed within the government to date has left a policy vacuum.
- Those areas in which the government is uniquely equipped to motivate action by the system should be recognized and consciously added to government planning.
- The federal government should continue to promote the private sector led system and to identify and support the technical work it perceives to be in the national interest.
- The federal government should continue to play the role of facilitator and active participant in standardization activities.
- Federal leadership and policies directed toward standardization should be carefully considered, crafted and implemented to ensure that they do not discourage innovation or negatively impact US business opportunities for growth abroad.
- Federal government policy should highlight the strategic role and value of standardization in accomplishing national policy objectives.

# **Federal Government Effectiveness**

- Law and policy in the United States have institutionalized the role of the federal government as a customer of the standardization system rather than taking on a leadership role in setting strategy, objectives and directions for standardization.
- Confusion within the government as to appropriate roles leads to lost opportunity for the public sector to be an equal and effective partner in standardization.
- The effectiveness of U.S. government participation depends on the level of involvement and commitment of resources and manpower to the process.
- Effectiveness could be improved via better communication between the public and private sectors, better framing of the issues at the outset where the government has an interest, and clear definition of end goals.

# **Government Agencies**

- There is little existing guidance on the nature of the government's interest in standards and how this should be reflected in agency practices.
- There is inconsistent interpretation and policy implementation across federal agencies, resulting in broadly varying policies relating to agency staff participation in standardization activities.
- Obsolete policies and regulations impede progress and innovation in key technology areas.
- The current structure of government offices charged with standards and conformance work varies widely across agencies and may not be as efficient and streamlined as possible.
- Need more consistent interpretation and policy implementation across Federal agencies related to government participation in standards development.
- Need better coordination of government engagement in standardization, better prioritization of needs and clear timelines.
- Agency leaders should work to increase alignment of standardization goals and objectives within and across agencies, especially in cross-cutting areas. Where objectives are overlapping or unclear, agencies may be providing redundant support or even competing with each other for work in different portfolios.
- When an agency or agencies commit to a cooperative standardization effort with industry, that commitment should be consistent and the results that the effort produces should be used where feasible. There should be clear communication regarding both successes and failures.

# NIST Role

- NIST's expertise on standards and technology issues, and its well-deserved reputation as a science-based organization that serves as an honest broker, can and should be leveraged by the U.S. government.
- NIST is in a unique position within the government to coordinate across agencies on national and international policy issues that related to the standards system and standards themselves.

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- NIST leadership can accelerate the development and availability of standards where a national public policy priority has been identified and there is an urgency to achieve results quickly.
- NIST's roles as facilitator and convener should be explicitly recognized and institutionalized. These roles assume a long term commitment by NIST, standards organizations and standards users to ensure that adequate support is provided throughout the standardization lifecycle through development to deployment with explicit consideration of demonstrating interoperability where needed via test beds, joint testing activities and other means.
- NIST should lead development and implementation of a real-time mechanism for the government to let the impacted community know when a standards-based solution is needed, and for SSOs to let the government know when key standards are being revised.
- NIST should be called on to improve the objective tools and guidance available to agencies when they must make value judgments about when standards efforts can be accorded governmental preference.

### **Private Sector Role**

- The private sector continues to play a leading role in the U.S. standards system. A significant fraction of standards that are developed and used are created with little or no participation by federal agencies.
- The private sector is uniquely positioned to address market needs for standards, and with appropriate engagement can partner with the federal government to help meet the federal government's standards needs.
- The private sector is in a central position to identify emerging trends and issues where active federal government engagement may be necessary to help maintain a level playing field for U.S. interests.

### **Adequacy of Resources**

- Standards participation is an investment in the future and has to be viewed as such by the leadership of agencies and corporations alike.
- More resources need to be applied to increase participation in standards setting activities funding of travel, membership dues.
- Need sustained and properly resourced participation.
- For standards of significant interest to the federal government, particularly those addressing national priorities, the federal government should consider multi-year investments to assure continuity of federal engagement, and to indicate federal government support.

# Intellectual Property Rights (IPR) in Standards

- IPR policies of SSOs need to take into account the interests of both IPR holders and those seeking to use or implement the IP included in the standards or standards.
- IPR policies of SSOs should be easily accessible and the rules governing the disclosure and licensing of IPR should be clear and unambiguous.

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- SSOs are in the best position to establish effective policies for addressing IPRs related to the standards that they develop. IPR are important to encourage innovation. It is important to take them into account during the standards-setting process, particularly with respect to interoperability standards for technologies with a significant ICT component.
- SSOs have demonstrated responsibility in drafting IPR policies They should continue to be the focal point for the content of their standards and specifications and in dealing with the related IPR issues in their policies and procedures. There is no one ideal, one-size-fits-all IPR policy.
- While to date there have been few definitive instances of patent hold up among the very large number of standards developed and deployed, further discussion about the potential impact of IPR in standardization for technologies of interest in meeting national priorities is timely.