

Please find below my personal views related to the RFI... They are brief in scope due to time available to make these responses.

## **Responses to Request for Information**

### **6. Other technologies involving significant Federal agency participation in standards setting.**

**Response:** *This response is submitted in the context of civil works and construction, specifically in the areas related to geotechnical, environmental and construction materials engineering and testing. These technologies are critical to the development and maintenance of our infrastructure.*

## **Standards Setting Processes, Reasons for Participation and the Benefits of Standardization**

### **Who participates in standards-setting activities?**

**Response:** *ASTM Committee D18 on Soil and Rock is one several ASTM Committees whose scope covers standards development activities in these areas. This response is primarily in the context of Committee D18 activities. There are three general classes of participants:*

- *Private sector: engineering consultants, laboratories and testing agencies, [design/build contractors](#), product manufacturers, etc.*
- *Academia: civil and environmental engineering professors*
- *Public sector: Includes, but not limited to, representatives of the US Bureau of Reclamation, US Army Corps of Engineers, USDA Soil Conservation Service, various state and local civil works administrators*

### **What are the most important reasons for participation?**

**Response:** *To develop new test methods for characterizing soil, rock and related construction material properties for construction purposes, to improve / maintain existing methods, etc.*

### **What are the benefits of developing standards for this sector?**

**Response:** *To develop consistency in nomenclature, consistency in approaches to testing construction materials so that results can be interpreted consistently for safe, lean, sustainable engineering design to reduce the potential for failure of infrastructure elements as a matter of public safety.*

### **How do the standards impact organizations and their competitiveness?**

**Response:** *There is constant innovation in new test methods and upgrades to existing methods. These innovations and upgrades can be positive to organizations in that they are getting higher quality results or negative if organizations fails to maintain pace with them.*

### **How has standardization spurred innovation in the technology sector(s) that is the subject of your comment?**

**Response:** *There are over 370 standards in the area of soil and rock, not to mention concrete, asphalt and other related construction materials. Higher quality results obtained from technologies covered by these standards allow for leaner, safer, sustainable designs.*

**What is the current phase of the standards development process for this technology?**

**Response:** *Ongoing since 1936. Ten new standards were approved in 2010 and maintenance/updates to existing standards are ongoing.*

**How has the process worked so far?**

**Response:** *Overall, reasonably well.*

**When developing standards, how are the standards-setting processes managed and coordinated?**

**Response:** *The processes in this context are managed under the ASTM International bylaws and regulations.*

**Is there a strategic plan that identifies the standards needs and defines the standards development life cycle?**

**Response:** *Yes*

**Are there barriers to developing high level strategies for standard-setting activities?**

**Response:** *Yes, this work is done by volunteer participants whose primary interest is the standards themselves. The primary barrier is that in this context, there is limited funding available for the time / expense commitments and most volunteers use their time in the technical development of the standards rather than strategic planning.*

### **Perspectives on Government's Approach to Standards Activities**

The Sub-Committee would like to identify and assess the methods by which Federal agencies work with standards-setting organizations, industry, State and local governments, and consumers to develop standards. The Federal Government approaches standard setting in various ways. Sometimes staff members from Federal agencies participate directly as subject matter experts in standards-setting activities that are led by the private sector. At other times, agencies identify their standards needs and requirements, and then reach out to the private sector to develop the standards. Sometimes, agencies fund private standards-setting activities to develop standards needed by that agency. At other times, agencies take an active role in both identifying standards needs and leading the standards development process in collaboration with the private sector. In many technology sectors, multiple Federal agencies with differing roles and mandates participate in standards development activities.

Responses to the following questions will help the Sub-Committee to better understand which methods of engagement by Federal agencies are most effective and why.

**What methods of engagement are used by Federal agencies to participate in private sector-led standards development?**

**Response:** *In the context of ASTM Committee D18, Federal agencies have funded their own staff to participate in standards development activities. Such agencies have included the US Bureau of Reclamation, US Army Corps of Engineers, USDA Soil Conservation Service and US EPA. This participation has been reduced dramatically in the past 15 to 20 years.*

*Additionally, US EPA funded documented travel expenses (labor expenses were all pro bono by participants) of Subcommittee D18.21 to develop a series of groundwater standards in the 1990s. Subcommittee D18.12 was similarly funded by the Nuclear Regulatory Commission in the 1980's to develop a series of rock standards.*

**How transparent is each method?**

**Response:** *Question not understood. The ASTM standards development process is open to all ASTM members.*

**How effective is each method?**

**Response:** *Some of our most productive members were Federal agency employees before funding was reduced for their participation. Two of the most significant blocks of standards were partially funded by Federal agencies.*

**How could the methods be improved?**

**Response:** *Provide funding for representatives of the USBR, USACOE, USEPA and USDA SCS to again participate in ASTM International construction-related committees.*

**What other methods should the Federal agencies explore?**

**Response:** *Funding as done in the past would be adequate.*

**What impact have Federal agencies had on standards activities?**

**Response:** *As mentioned above, some of our most productive members were Federal agency employees before funding was reduced for their participation. Two of the most significant blocks of standards were partially funded by Federal agencies.*

**How well do Federal agencies coordinate their roles in standards activities in the sector of interest?**

**Response:** *This varies between agencies but in general they have worked together well.*

**When Federal agencies have been involved in standards setting efforts in a technology sector, how has the progress of standards setting efforts in this technology sector changed after Federal agencies became involved?**

**Response:** *As mentioned above, some of our most productive members were Federal agency employees before funding was reduced for their participation. Expenses for two of the most significant blocks of standards were partially funded by Federal agencies.*

**Are Federal agencies generally receptive to input from other participants in standards setting activities?**

**Response:** *This varies between agencies but in general they have worked together well.*

**Does receptiveness tend to depend on whether the Federal agency is a regulator or a customer?**

**Response:** *This varies between agencies but in general they have worked together well.*

**In those sectors where Federal agencies plays a significant role in standards activities, how valuable and timely is the work product associated with this effort?**

**Response:** *As mentioned above, some of our most productive members were Federal agency employees before funding was reduced for their participation. Expenses for two of the most significant blocks of standards were partially funded by Federal agencies.*

## **Issues Considered During the Standards Setting Process**

Various factors (e.g., technology, competition, innovation, intellectual property rights, foreign regulations, etc.) arise and are considered and addressed during standards development. These aspects play a role in the adoption and use of the standard. The Sub-Committee is interested in understanding the types of issues that have been considered, and how these have been addressed/are being addressed.

**Has Federal agency participation in standards-setting impacted the consideration and resolution of these issues, and the standards setting processes?**

*Response:* In the context of ASTM D18, Federal agency participation has generally had a positive impact on technology issues related to standard development activities.

**With respect to foreign regulations, the Subcommittee is interested in understanding how foreign technical regulations are considered and addressed during standards setting or conformity assessment activities. Are efforts made to determine whether there is potential for overlap or duplication with existing international standards?**

*Response:* In the context of ASTM D18, there is nominal overlap. The bulk of ASTM D18 standards pre-date standards by other international SDOs and often, the international SDOs either directly adopt or base their own versions on D18 standards.

**How are other appropriate international standards that may be of interest identified?**

*Response:* In the context of ASTM D18, most of our membership attempts to identify whether there are adequate standards existing from any available source.

**Are efforts made to identify existing or planned regional or national standards that may be considered for use as the basis for foreign technical regulations, rather than the international standard being considered by the committee?**

*Response:* In the context of ASTM D18, most of our membership attempts to identify whether there are adequate standards existing from any available source.

**With respect to intellectual property, the Sub-Committee would like to understand the approaches you have experienced or found most appropriate for handling patents and/or other types of intellectual property rights that are necessary to implement a standard. How does the need for access to intellectual property rights by Federal agencies factor into the use or development of standards?**

*Response:* This is generally not an issue for ASTM Committee D18 directly but of considerably more concern to ASTM International as a whole.

**To what extent, if any, has the development, adoption or use of a standard, by Federal agencies in this technology sector been affected by holders of intellectual property?**

*Response:* This is generally not an issue for ASTM Committee D18 directly but of considerably more concern to ASTM International as a whole.

**How have such circumstances been addressed?**

*Response:* This is generally not an issue for ASTM Committee D18 directly but of considerably more concern to ASTM International as a whole.

**Are there particular obstacles that either prevent intellectual property owners from obtaining reasonable returns or cause intellectual property owners to make IP available on terms resulting in unreasonable returns when their IP is included in the standard?**

**Response:** *This is generally not an issue for ASTM Committee D18 directly but of considerably more concern to ASTM International as a whole.*

**What strategies have been effective in mitigating risks, if any, associated with hold-up or buyers' cartels?**

**Response:** *This is generally not an issue for ASTM Committee D18 directly but of considerably more concern to ASTM International as a whole.*

### **Adequacy of Resources**

The availability and commitment of financial resources, personnel, and industry expertise may impact the success of standards development. In some instances, changing priorities or changes in an organization's budget may impact the resources an agency commits to an ongoing project. The Sub-Committee would like to better understand the resources that both private sector organizations and Federal agencies commit to standards-setting activities, constraints on those resources, and how the level of resources affects the success of the effort.

**What resources are needed to successfully complete the efforts?**

**Response:** *Restore the funding so that Federal agencies are represented and actually participate again in ASTM D18 activities*

Taking into account budget constraints and competing initiatives, have Federal agencies committed adequate resources?

**Response:** *Prior to the year 2000, probably yes... Since then, definitely not.*

What resource constraints impact the successful completion of the standards efforts?

**Response:** *Having funded, committed volunteers to do the work.*

Time did not permit further or more detailed response to this RFI.