National Science and Technology Council's Sub-Committee on Standards,

The following are my individual comments submitted in response to the invitation for comments by the Sub-Committee of Standards of the National Science and Technology Council (Federal Register Notices, Vol. 75, No. 235, Pages 76397-76399, December 8, 2010). These comments are not intended to represent the input of any specific voluntary consensus standards organization, federal agency, or federal contractor.

While I believe there are notable examples of federal agency participation in the development and implementation of standards and conformity assessment activities and programs there is much potential for broader and more effective participation. Such broader and more effective participation having the potential to benefit both our economy and environment. I therefore appreciate the opportunity through these comments to suggest areas for improvement.

### Radioactivity Detectors and Radiation Monitors (ANSI N42.3x and N42.4x)

While I was not directly involved in the development of the mentioned standards I was aware of this effort. I believe that there could have been greater participation in the development of these standards if the effort had been organized through ASTM International or similar body. While ANSI is a well recognized standards development organization the nature of their membership is more focused on large firms and organizations. Given the cost of such membership there is a smaller number of such firms and organizations that are ANSI members and that results in a smaller number of participating individuals who are available to participate. In contrast, ASTM International is more focused on an individual membership basis. Given a lower cost of individual membership there is a larger membership base which leads to a greater number of participating members in standards development activities. On the other hand, perhaps it was the intent of the organizers to limit participation and chose ANSI for that purpose.

A positive attribute of the above effort is that in the end there was open access to the developed standards. This allowed much broader access to the resulting developed standards beyond those who directly participated in their development. It should be remembered that most voluntary standards development organizations rely to major extent on the sales of developed standards to support their ability to develop and maintain their standards. So such open access requires a sponsoring organization to make up that lost sales income.

## Federal participation in standards-setting activities

In my participation with ASTM International I see federal participation resulting more through the efforts of individual workers than based on direction from their senior agency management. Such workers who are currently participating in standards development activities are more experienced workers who see a clear value in participating whereas more junior workers may be unwilling to make the effort to secure management approval to participate. Thus there is the potential to see diminished participation as those more experienced workers move into retirement. It is more typical that individual workers need to convince their management of the value in participating than the simply answering the clear call of their management about the need to participate in such activities. While there are clearly

federal driven and supported efforts such as "ANSI N42.3x and N42.4x" these are much more the exception than normal practice. Ensuring a healthy voluntary consensus standards organization infrastructure requires sustained and broad support instead of only the occasional focused high-profile campaign.

I would also note that within some federal agencies there can be a great deal of variation in the willingness of some agency components to participate in and support voluntary consensus standard organizations. It would appear that the standards executives within federal agencies don't have sufficient influence or resources to identify and address such instances.

### **Directory of Agency Participation**

I would like to note the positive practice of the Department of Energy in compiling a directory of participating federal and M&O contractors in voluntary consensus standards organizations. That directory (DOE-TSL-4-2006, Directory of DOE and Contractor Personnel Involved in Non-Government Standards Activities) provides some recognition of those involved in such activities.

### **International versus Domestic Voluntary Consensus Standards**

While OMB Circular A-119 suggests some preference for international versus domestic voluntary consensus standards, there should be the awareness that participation opportunities are practically more limited for participation in meetings of international voluntary consensus standards organizations. The meetings of such international voluntary consensus standard organizations would typically be held overseas for which there would be approval and cost limitations to frequent attendance by federal agency personnel. Some ISO technical committees have even seemed reluctant to use such basic communication tools such as conference calls to enable broadened participation.

Also in the case of ISO there is the additional limitation that voting is done on a national basis. So a US government federal agency will find its ability to influence an ISO standard much less than a similar standard under ASTM International or similar standards organization.

#### **ASTM International**

ASTM International has significant participation from members in foreign countries and is actively engaged in outreach to still more foreign countries. Many ASTM International standards are also available in foreign languages. However, ASTM International is not recognized by many involved in ISO as a provider of international standards. So I've seen many cases where ISO technical committees are more than happy to develop ISO standards that duplicate the purpose of existing ASTM International standards. In some cases the duplicative ISO standard being developed is based on less current technology than the existing ASTM International standard.

As an ASTM International member I must also say that the staff of ASTM International is continually improving the standards balloting and management systems that I depend on as a member to help develop new standards. This has allowed me to accomplish more within the same amount of time I have available. I would hope that through ANSI that the various US standards development

organizations are sharing lessons learned about such improvements to the standards development process.

# **Academic Research and Standards Development**

I'm pleased to see in section 10 of the recent revision to the United States Standards Strategy a focus on the role of universities and colleges. However, I believe that that we are not fully addressing the potential for transitioning academic research into standards development. In other words, many academic researchers and their federal sponsors see the final step of the research process to be publication in a peer reviewed journal. There should be more awareness of the potential for following up with transitioning some research outcomes to standards development.

#### **Economic and Environmental Benefit of Standardization**

I believe that there is a significant economic benefit to our economy through standardization of many electronic and mechanical systems. Through such standardization efforts our economy is able to benefit from greater efficiency in producing goods and services. However, I think there is much we can do to insure greater standardization of many electronic and mechanical systems.

The lack of standardization can also negatively impact our environment when electronic and mechanical systems that are disposed of simply because they are not current. How many direct current power supplies are disposed of simply because we are unable to use them on another electronic device because of incompatibility in plug, voltage, and/or current? In this example, we are starting to see some vendors standardize on USB based power supplies but it has been a long time coming and there is a great distance to go. I believe there are many other sectors where standardization can increase our economic efficiency and benefit our environment.

Sincerely yours,

Mr. Donivan R. Porterfield