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Reply to Request for Comment; Federal Register / Vol. 74, No. 37 / Thursday, February 26, 2009

Submitted by the Association for Competitive Technology

On behalf of the Association for Competitive Technology's (ACT) more than 3,000 programmers, integrators and small, technology-based businesses, I am pleased to submit comments to the Office of Management and Budget (OMB) in response to the President's Directive that OMB look into issues including:

The relationship between OIRA and the agencies; Disclosure and transparency; Encouraging public participation in agency regulatory processes; The role of cost-benefit analysis; The role of distributional considerations, fairness, and concern for the interests of future generations; The best tools for achieving public goals through the regulatory process.

ACT is an international education and advocacy group for the technology industry. Focusing on the interests of small and mid-size entrepreneurial technology companies, ACT advocates for a "Healthy Tech Environment" that promotes innovation, competition and investment. ACT has been active on issues such as intellectual property, international trade, e-commerce, privacy, tax policy and antitrust. ACT represents software developers, systems integrators, IT consulting and training firms, and e-businesses from around the world.

While OMB activities will have considerable impact on our membership across many issues, we want to focus specifically on the role of the government in supporting technical standards through procurement and regulation. ACT has been a leading participant in discussions regarding standards throughout the world, and we believe that the U.S. government's policy as set forth in OMB Circular A-119 has been an effective tool for instructing the government on how to deal with standards. As you know OMB Circular A-119 was created to support the National Transfer and Advancement Act, which encourages federal agencies to use private sector standards instead of federal rule-making whenever possible.

We support the framework OMB Circular A-119 has established for the U.S government with regards to standards implementation. However, if the government does adopt changes based on public and industry feedback, we believe that three important characteristics must exist for governments to have an effective standards policy:

1. Choice: because technology always moves faster than government
2. Opportunity: because innovation is key to building growing economies
3. Practicality: because government must look to solutions that work for citizens first

Choice

Given the speed at which new technology is developed and implemented in the marketplace, it is essential that governments not find themselves locked in to a specification or mandate that hampers the ability of an agency to provide services. Instead, agencies should look to build RFPs based on specific goals, and allow technology to find solutions. Goals such as interoperability, transparency, and feature-set should be included, as should other provisions that prevent "siloeing" of data. Standards will play an important role here, but they should be looked at as part of a goals-based solution, not the solution itself.

Without a goals-based solution, governments end up mandating standards or products that may prevent some citizens from having access to government data, and the government may find itself locked into old, outdated technology. One only needs to look at the history of the Department of Defense and the computer programming language "Ada" to see the downside of mandates.

Ada was mandated for use by almost all significant Defense Department (DoD) software projects for approximately 10 years, from 1987 to 1997, and there were a large number of such projects. Although Ada was an ISO standard, it failed to generate the needed support from the marketplace. Other languages like C++ and Java were developed and quickly became the cornerstone for new technologies. However, because the DoD was locked into Ada by mandate,

it wasn't able to take advantage of the computing revolution taking place in the mid 90's. Moreover, when changing to a different language became imperative, the government was stuck paying millions of dollars to a select few vendors with Ada skills. A 2000 study titled "Is Ada Dead or Alive Within the Weapons System World?" said it best:

Most importantly, a lack of popularity and education and training shortfalls has detracted from Ada's use in new programs. Today's projects demand a language whose products are stimulated by market forces, not edicts. Such forces stimulate product developments along with language learning and use¹.

Even more interesting is that after the mandate was lifted, market competition helped make the Ada standard even better at solving DoD problems - many see the 2005 Ada specification as a large improvement over previous implementations. Full exposure to market competition led to benefits to the Ada standard, directly counter to the effect that government mandates had.

Opportunity

In order to keep from repeating DoD's mistake, government's must preserve opportunities for new companies to provide solutions for the problems of today, but also for needs we haven't yet considered. Therefore, it is essential that the government maintain strong support for the intellectual property system and the incentives it provides. Today, OMB circular A-119 does an excellent job of laying the foundation for support of standards that include "...provisions requiring that owners of relevant intellectual property have agreed to make that intellectual property available on a non-discriminatory, royalty-free **or reasonable royalty basis** to all interested parties" [emphasis added]. We believe it is essential that any government standards policy include support for companies to recapture the costs that arise from taking enormous risks to develop new technology; earning revenue from royalties should be one possible reward.

Furthermore, sweeping procurement mandates or overly restrictive standards favor large entities, not small- to medium-sized entities (SMEs). Often the most innovative solution does not come from a large company, but rather from the smallest. Government policies must preserve these crucial opportunities for SMEs--if the government were to create a system where only royalty-free standards were allowed, it would push many of these companies to keep their best innovations outside of the standards system.

Although some have argued that intellectual property prevents implementation of standards by Open Source technologies, we have not seen any legitimate evidence to support these claims. There are endless examples of open source technologies interoperating with royalty-bearing open standards, and even fully proprietary standards/protocols, in the market today. One of the best examples is seen in the Open Source Android mobile phone operating system, which interoperates flawlessly with royalty-bearing standards like GSM, Bluetooth, and WiFi. Clearly, technology is providing answers without government intervention.

Practicality

Finally, government implementation of standards needs to be practical. Especially in cases where the government is considering mandating the use of a standard, basic questions must be answered first:

1. What is the business case for the standard? What problem does it solve? Why would the government use the standard, and why would someone else support it? Is the use of the standard spurred by growth in the commercial sector, or is it strictly for niche markets?
2. What are the switching costs for the standard? How is the standard supported in the education and training sphere? Do institutions of higher learning produce graduates who know how to implement and work within the standard environment?
3. Will the standard enhance or prevent citizens from fully participating as equals in all government programs? Does it meet and exceed government accessibility requirements?

¹ <http://www.stsc.hill.af.mil/crosstalk/2000/12/reifer.html>

Without those initial questions answered, governments can find themselves promoting policies that neither lower costs, nor increase access to government. Recently the government of Munich, Germany, found itself in the awkward position of backtracking from the adoption of certain open source technology not because the underlying technology was flawed, but rather because they did not properly map out how the technology would be implemented, and by whom. In Munich's case, they assumed a pool of highly skilled workers would be available at low or no cost to solve specific government-level implementation problems. When no one stepped up to complete the work, the city was forced to improvise solutions using older technology inside of a "virtual workspace." Instead of finding a low cost solution, they were forced to implement two systems with high support costs.

Successful technology standards are those created by the market, rather than those imposed on the market. Because markets are fluid and difficult to predict, often an entity will mandate a technology standard in an attempt to isolate itself from the detrimental effects of technology's dynamic nature. An unfortunate side-effect is that the entity is deprived of precisely what we seek from technology: its dynamic ability to find new ways to solve problems. And when governments are urged to adopt technology standards, it is often an attempt to use the purchasing power and influence of a large government entity to create change in technology markets, rather than merely a misguided effort to ensure "best practices." Either motivation is doomed to failure.

As the government moves toward the transformative goals of a more open government with new levels of transparency, accountability, and participation, we hope that decision-makers will make technology choices based on a set of criteria that are goals-based. The government should be choosing products that best meet the needs of the country and its citizens instead of mandating one technology or business model while excluding others, and should be mindful to retain its current support of standards that maintain intellectual property and the incentives it provides.

ACT would like to thank you for the opportunity to provide comments on this matter. If you have questions, we can be reached at [REDACTED]