February 5, 2019

Walter G. Copan, Ph.D.
Under Secretary of Commerce for Standards and Technology
Director, National Institute of Standards and Technology
100 Bureau Drive
Gaithersburg, MD 20899

Dear Under Secretary Copan,

Internet Association, BSA | The Software Alliance, and the Software and Information Industry Association are pleased to provide comments on the National Institute of Standards and Technology's ("NIST") draft green paper on the Return on Investment Initiative for Unleashing American Innovation ("Green Paper"). We share NIST's aim of maximizing innovation in our economy and appreciate your organization's efforts to achieve that goal.

Our associations represent the breadth of the tech industry, including software, internet, and cloud companies. Our goal is to foster innovation, promote economic growth, and empower people through the power of technology and the internet. Our member companies invest heavily in research and development and are committed to engaging in NIST's efforts to increase American innovation. We applaud NIST for including some very helpful recommendations, such as increasing the authority of agencies to protect the trade secrets of its private partners. Such a change would surely increase tech industry participation in public-private partnerships. We do, however, have concerns with the Green Paper's proposal to establish copyright for government-authored software.

The copyright laws emanate from the grant of power in Article I, Section 8, clause 8 of the Constitution, which permits Congress to confer exclusive rights to authors and inventors for limited times. The Founders included that provision to unleash innovation by creating a federally harmonized set of incentives for inventive and creative endeavors. Recognizing that such incentives are unnecessary for the production of government works,[1] federal law has

[1] We note that as applied to private works, Congress has scrupulously maintained that incentive. For example, the Open Government Data Act creates a presumption that agencies

since 1909 denied copyright protection for works authored by government employees within their employment. That principle was recodified in section 105 of the 1976 Act, which states that "Copyright protection under this title is not available for any work of the United States Government."

Section 105 reflects the commonsense proposition that copyright should not act as a barrier to the public's access to and use of materials created by the government. We are concerned by aspects of the Green Paper that could threaten such access. Specifically, the Green Paper recommends legal reforms, including amendments to Section 105, to "allow agencies to register a copyright to establish protection of the commercialization of 'software' that are products of R&D for which the Federal Government owns a right, title, or interest." In support of this recommendation, the Green Paper suggests that a lack of copyright protection has "led to lost opportunities to transfer software developed by Federal researchers," thereby creating a disincentive for commercialization. The Green Paper likewise asserts that the "ineligibility of the government to copyright software has frustrated endeavors to release and participate in open source development" because assets that are not subject to copyright protection cannot licensed on open source terms. Both claims merit closer examination.

The Green Paper's suggestion that a lack of copyright protection creates disincentives for commercialization of government-created software is predicated on a GAO Report from 1990. The GAO Report suggests "businesses are unwilling to invest in [government] software without copyright protection and some guarantee of exclusivity" and points to "[e]xecutives from two businesses" who "stated that [in order to invest in commercializing government-created code] their companies would require copyright protection and exclusivity to prevent competitors from marketing alternative software packages that are potentially less developed and less expensive." We are highly skeptical that the factual predicates of this nearly 30-year-old report remain accurate. Even putting that aside, we have significant concerns with the notion that the government could use copyright to afford any single entity with exclusive access to a government-authored work.

The Green Paper's suggestion that a lack of copyright protection for government works has thwarted open source development efforts is likewise deserving of further scrutiny. A variety of initiatives across the agencies signal an increasing interest in promoting more robust collaboration between the government and the open source community. To that end, in 2016, the Office of Management and Budget ("OMB") issued a Federal Source Code Policy with a three-year pilot project that requires government agencies to "release as [open source software] at least 20 percent" of any custom-developed code, including code developed entirely by government employees. To comply with this requirement, OMB directs agencies to "append appropriate OSS licenses to the source code."

---

should make non-sensitive government data freely available to the public in open, machine-readable formats. The OGDA expressly preserves the existing incentives provided by intellectual property law for non-government works.

Although code wholly authored by government employees is not subject to copyright protection, agencies have developed a variety of approaches for complying with OMB's directive. The General Services Administration's digital services delivery team, 18F, has implemented the Federal Source Code Policy by making government-authored code available using a CC0 1.0 universal public domain dedication. NASA has developed its own open source license agreement that "relies on contract law wherever copyright law is unavailable as a means by which to enforce the agreement's terms and conditions." And in 2018, the Department of Defense developed an approach forged around a "Developer Certificate of Origin" process that is focused on obtaining a legal certification that the government author of code is intentionally making his or her contribution available under the license associated with the project.

We acknowledge that the various agency approaches for participating in open source development projects may reflect a degree of uncertainty about the ideal mechanism for contributing government-authored code to open source projects. However, conferring copyright protection to such code is a blunt solution that should be considered only as a last resort. Instead, we urge NIST to recommend that OMB convene relevant stakeholders for a survey of potential mechanisms by which agencies can comply with the Federal Source Code Policy by sharing government-authored code with the open source community under terms that are efficient, predictable and enforceable. Such a process should include licensing experts from the agencies that are subject to the Federal Source Code Policy, subject matter experts from the Copyright Office and Patent and Trademark Office, and representatives from industry, academia and the open source community.

We urge NIST to refrain from recommending the establishment of a copyright for software created by federal employees. Our associations appreciate the opportunity to comment on this draft Green Paper. While we wish to express our views on this specific recommendation, this does not diminish our broader support for NIST's efforts to enhance innovation and commercialization. The private sector is an essential partner in building on federal R&D, and intellectual property plays an important role in enabling this cycle of investment and innovation. We value the work NIST is doing to increase innovation in the economy and employ government investment for the benefit of the American people.