

**Calendar No. 156**

118TH CONGRESS }  
*1st Session* }

SENATE

{ REPORT  
118-73

STRENGTHENING AGENCY MANAGEMENT  
AND OVERSIGHT OF SOFTWARE ASSETS ACT

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R E P O R T

OF THE

COMMITTEE ON HOMELAND SECURITY AND  
GOVERNMENTAL AFFAIRS  
UNITED STATES SENATE

TO ACCOMPANY

S. 931

TO IMPROVE THE VISIBILITY, ACCOUNTABILITY,  
AND OVERSIGHT OF AGENCY SOFTWARE ASSET  
MANAGEMENT PRACTICES, AND FOR OTHER PURPOSES



JULY 25, 2023.—Ordered to be printed

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## STRENGTHENING AGENCY MANAGEMENT AND OVERSIGHT OF SOFTWARE ASSETS ACT

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Mr. PETERS, from the Committee on Homeland Security and  
Governmental Affairs, submitted the following

### R E P O R T

[To accompany S. 931]

[Including cost estimate of the Congressional Budget Office]

The Committee on Homeland Security and Governmental Affairs, to which was referred the bill (S. 931) to improve the visibility, accountability, and oversight of agency software asset management practices, and for other purposes, having considered the same, reports favorably thereon with an amendment, in the nature of a substitute, and recommends that the bill, as amended, do pass.

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#### I. PURPOSE AND SUMMARY

S. 931, *Strengthening Agency Management and Oversight of Software Assets Act*, seeks to reduce costs to taxpayers and improve agency cybersecurity. The bill requires agencies to conduct a comprehensive assessment of their software licensing, deployment, acquisition, and true use capabilities. The bill also requires agencies, after submitting the findings of the comprehensive assessment to the agency head, Congress, and the Comptroller General, to establish a plan to streamline and consolidate agency licenses. Further, the bill requires the Director of the Office of Management and

Budget (OMB) to publish a government-wide strategy for software modernization, using information provided to the Director through agency plans and comprehensive assessments.

## II. BACKGROUND AND NEED FOR THE LEGISLATION

Billions of dollars are spent on software purchases, contract re-ups, and license modifications every year, and the current way vendors sell (and agencies often purchase) software leaves agencies with incomplete information regarding what software assets have been purchased or are deployed on their networks.<sup>1</sup> This bill requires comprehensive assessments of all agency software management contracts, including those through resellers or integrators, to provide Chief Information Officers (CIOs), Chief Financial Officers (CFOs), and Chief Acquisition Officers (CAOs) with a comprehensive, performance-based assessment of their software assets.

This bill builds on previous efforts by Congress to ensure agencies have adequate visibility into their software license inventories. During the 114th Congress, Congress passed the *Making Electronic Government Accountable By Yielding Tangible Efficiencies Act of 2016* (MEGABYTE Act).<sup>2</sup> The MEGABYTE Act required the OMB Director to issue a directive to agencies that would require each executive agency CIO to develop a comprehensive software licensing policy.<sup>3</sup>

Beyond the requirements in the MEGABYTE Act, the intent of this bill is to enable greater visibility into the actual use, deployment, costs, and performance of all software assets in their environment. Therefore, this bill presses agencies to conduct comprehensive assessments of software purchased, deployed, or in use throughout the agency. Agencies are then required to consider enterprise-licensing agreements or otherwise streamline disparate agency procurements to improve visibility across all agency software assets. The goal of this bill is to empower agency CIOs to make smarter decisions and drive greater value in their software contracts, reduce costs, stop unnecessary software waste, and improve performance of agencies' critical software assets.

Finally, this bill consolidates software purchasing government-wide, with the goal of reducing unnecessary spending and enhancing interoperability of the government's most robust and widely used software. The bill requires OMB to develop a strategy, based on the findings of the comprehensive assessments and agency-developed plans, to drive greater efficiencies on critical software asset management goals across all agencies.

## III. LEGISLATIVE HISTORY

Senator Gary Peters (D–MI) introduced S. 931, *the Strengthening Agency Management and Oversight of Software Assets Act*, on

<sup>1</sup>See, *Bill to overhaul agencies' software purchasing progresses in Senate*, FEDSCOOP (May 17, 2023) ([www.fedscoop.com/bill-to-overhaul-agencies-software-purchasing-progresses-in-senate/](http://www.fedscoop.com/bill-to-overhaul-agencies-software-purchasing-progresses-in-senate/)); *2022 in review: FedRAMP reform enacted, SAMOSA Act progresses*, FEDSCOOP (Dec. 31, 2022) ([www.fedscoop.com/2022-in-review-fedramp-reform-enacted-samosa-act-progresses/](http://www.fedscoop.com/2022-in-review-fedramp-reform-enacted-samosa-act-progresses/)); *Senate bill looks to software licensing for cost savings*, Nextgov (Sept. 12, 2022) ([www.nextgov.com/policy/2022/09/senate-bill-looks-software-licensing-cost-savings/377050/](http://www.nextgov.com/policy/2022/09/senate-bill-looks-software-licensing-cost-savings/377050/)); *U.S. Government IT Spending Trends in 2022*, ExecutiveBiz (Jun. 13, 2022) ([www.executivebiz.com/articles/u-s-government-it-spending-trends-in-2022/](http://www.executivebiz.com/articles/u-s-government-it-spending-trends-in-2022/)).

<sup>2</sup>Pub. L. No. 114–210 (2016).

<sup>3</sup>House Committee on Oversight and Government Reform, *MEGABYTE Act of 2016* (May 2016) (H. Rept. 114–587) at 2.

March 22, 2023, with original cosponsors Senator Bill Cassidy (R-LA), Senator Bill Hagerty (R-TN), Senator Thomas Tillis (R-NC), Senator Joni Ernst (R-IA), Senator Ron Wyden (D-OR), and Senator John Hickenlooper (D-CO). The bill was referred to the Committee on Homeland Security and Governmental Affairs.

The Committee considered S. 931 at a business meeting on May 17, 2023. At the business meeting, Senator Peters offered a substitute amendment to the bill as well as modification to the substitute amendment that made technical changes to the bill and required that agencies' plans consider the prevalence of software used across multiple agencies and how that information might help streamline software purchases. The Committee adopted the modification to the Peters substitute amendment and the Peters substitute amendment, as modified, both by voice vote, with Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Blumenthal, Paul, Lankford, Romney, and Scott present.

The bill, as amended by the Peters substitute amendment as modified, was ordered reported favorably by roll call vote of 11 yeas to 0 nays, with Senators Peters, Hassan, Sinema, Rosen, Padilla, Ossoff, Blumenthal, Paul, Lankford, Romney, and Scott voting in the affirmative, and with Senators Carper, Johnson, Hawley, and Marshall voting yea by proxy, for the record only.

#### IV. SECTION BY SECTION ANALYSIS OF THE BILL, AS REPORTED

##### *Section 1. Short title*

This section establishes the short title of the bill as the "Strengthening Agency Management and Oversight of Software Assets Act."

##### *Section 2. Definitions*

This section defines the terms "administrator," "agency," "cloud computing," "cloud service provider," "comprehensive assessment," "director," "plan," "software entitlement," and "software inventory."

##### *Section 3. Software entitlement and inventory integrity*

Subsection (a) requires each agency, not later than 18 months after enactment, to conduct a comprehensive assessment of all software entitlements and software inventories of the agency (including specific requirements within the entitlements and inventories). Agency CIOs, CFOs, CAOs, and General Counsels are to work together to complete the comprehensive assessment. Requirements of the assessment include: the current software inventory, entitlements, contract, and other agreements; a detailed accounting of software used or deployed within an agency; information and data on software entitlements; a categorization of software entitlements by cost, volume, and type; a list of restrictions on the software; and an analysis addressing the accuracy of the assessment, the management of contracts, and the extent to which the agency captures the total cost of the entitlements.

Subsection (b) allows for the agency to utilize contracts to support the work of the comprehensive assessment, provided there is no conflict of interest for the firm supporting the assessment and the contractor remains operationally independent from the agency.

Subsection (c) stipulates that the agency CIO shall provide the findings of the comprehensive assessments to the agency head.

Subsection (d) requires the agency head to submit the comprehensive assessment to the Director of OMB, Administrator of GSA, the Comptroller General, and the Senate Committee on Homeland Security and Governmental Affairs, and the House Committee on Oversight and Accountability within 30 days of receipt.

Subsection (e) allows for OMB and GSA to consult with agencies as they develop their comprehensive assessments and provide additional support, if requested by the agency.

#### *Section 4. Enterprise licensing positioning at agencies*

Subsection (a) requires the CIO, CFO, CAO, and Chief Data Officer of each agency to use the findings of the comprehensive assessment to develop a plan to consolidate agency software entitlement, including developing criteria and procedures for how the agency will adopt cost-effective acquisition strategies, which can include enterprise licensing. It also restricts operational entities from acquiring, using, developing, or operating any software entitlement or portion of a software entitlement without approval from the agency CIO, in consultation with the CAO.

Subsection (b) establishes the requirements of information that shall be included in the plan, including: the remediation of any software asset management deficiency; ongoing maintenance of software asset management; automation of software license management processes; ensuring adequate training for officers and employees on software acquisitions; maximizing the effectiveness of deployed software through measuring usage, tracking segmentation of the user base, supporting effective governance, and supporting interoperability; identifying software categories for conversion to more cost-effective options; cost estimates to move toward enterprise, open-source, or similar software options; identifying mitigations to minimize restrictions; ensuring purchases are made on publicly available criteria; estimating what additional resources, services, or support the agency may need to implement the plan; and any other information deemed necessary by the agency CIO.

Subsection (c) allows for the CIO of the agency to request the support of OMB or GSA to support the development of the plan.

Subsection (d) requires the agency CIO to submit the plan to the OMB Director and to the appropriate Congressional Committees not later than one year after the completion of the comprehensive assessment in required Section 3.

Subsection (e) requires the Director, in coordination with the GSA Administrator, the CIO Council, the CAO Council and other government and industry representatives identified by the Director, to establish processes to harmonize definitions and other information to support agency heads in developing their plans. OMB is required, in coordination with GSA, to submit to the Senate Committee on Homeland Security and Governmental Affairs and the House Committee on Oversight and Accountability a report detailing recommendations to leverage procurement policies and practices within two years, which must include ways that one or more agency can: increase interoperability of software licenses; consolidate licenses; reduce costs; improve performance; and modernize the management and oversight of software entitlements.

*Section 5. GAO report*

This section requires the Comptroller General, within three years of enactment, to provide a report to Congress on agency cross comparisons and other government-wide analyses on agency software management practices, policies, and procedures regarding software licensing modernization.

*Section 6. No additional funds*

This section prohibits additional funds from being authorized to be appropriated for the purpose of carrying out this bill.

V. EVALUATION OF REGULATORY IMPACT

Pursuant to the requirements of paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee has considered the regulatory impact of this bill and determined that the bill will have no regulatory impact within the meaning of the rules. The Committee agrees with the Congressional Budget Office’s statement that the bill contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA) and would impose no costs on state, local, or tribal governments.

VI. CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

<b>S. 931, Strengthening Agency Management and Oversight of Software Assets Act</b>			
As ordered reported by the Senate Committee on Homeland Security and Governmental Affairs on May 17, 2023			
By Fiscal Year, Millions of Dollars	2023	2023-2028	2023-2033
Direct Spending (Outlays)	*	*	*
Revenues	0	0	0
Increase or Decrease (-) in the Deficit	*	*	*
Spending Subject to Appropriation (Outlays)	0	2	not estimated
Increases <i>net direct spending</i> in any of the four consecutive 10-year periods beginning in 2034?	No	Statutory pay-as-you-go procedures apply?	Yes
		<b>Mandate Effects</b>	
Increases <i>on-budget deficits</i> in any of the four consecutive 10-year periods beginning in 2034?	No	Contains intergovernmental mandate?	No
		Contains private-sector mandate?	No
* = between zero and \$500,000.			

S. 931 would direct federal agencies to inventory the software operating on their information networks. Under the bill, the Office of Management and Budget (OMB) would assess federal practices for purchasing software and develop methods for acquiring governmentwide licenses for software products that are used by multiple agencies. The bill also would require agencies to report to the Congress and the Government Accountability Office on the effectiveness of their efforts.

OMB Memorandum M-22-18, Enhancing the Security of the Software Supply Chain through Secure Software Development

Practices, issued on September 14, 2022, requires federal agencies to create software inventories. Thus, because most of the software management activities required under S. 931 will be completed under current law, CBO expects that satisfying those requirements would not have significant costs. On the basis of similar reports to the Congress, CBO estimates that satisfying the reporting requirements would cost \$2 million over the 2023–2028 period. Such spending would be subject to the availability of appropriated funds.

Enacting S. 931 could affect direct spending by some agencies that use fees, receipts from the sale of goods, and other collections to cover operating costs. CBO estimates that any net changes in direct spending would be negligible because most of those agencies can adjust amounts collected to accommodate changes in operating costs.

The costs of the legislation, detailed in Table 1, fall within budget function 800 (general government).

TABLE 1.—ESTIMATED INCREASES IN SPENDING SUBJECT TO APPROPRIATION UNDER S. 931

	By fiscal year, millions of dollars—						
	2023	2024	2025	2026	2027	2028	2023–2028
Estimated Authorization .....	0	2	*	*	0	0	2
Estimated Outlays .....	0	2	*	*	0	0	2

\* = between zero and \$500,000.

The CBO staff contact for this estimate is Aldo Prosperi. The estimate was reviewed by Chad Chirico, Deputy Director of Budget Analysis.

PHILLIP L. SWAGEL,  
*Director, Congressional Budget Office.*

#### VII. CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

This legislation would make no change in existing law, within the meaning of clauses (a) and (b) of subparagraph 12 of rule XXVI of the Standing Rules of the Senate, because this legislation would not repeal or amend any provision of current law.