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(Original Signature of Member)

119TH CONGRESS
1ST SESSION

H. R. _____

To improve the visibility, accountability, and oversight of agency software asset management practices, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. CONNOLLY introduced the following bill; which was referred to the Committee on _____

A BILL

To improve the visibility, accountability, and oversight of agency software asset management practices, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Strengthening Agency
5 Management and Oversight of Software Assets Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

1 (1) ADMINISTRATOR.—The term “Adminis-
2 trator” means the Administrator of General Serv-
3 ices.

4 (2) AGENCY.—The term “agency” has the
5 meaning given that term in section 3502 of title 44,
6 United States Code, except that such term does not
7 include an element of the intelligence community.

8 (3) CLOUD COMPUTING.—The term “cloud
9 computing” has the meaning given the term in Spe-
10 cial Publication 800–145 of the National Institute of
11 Standards and Technology, or any successor docu-
12 ment.

13 (4) CLOUD SERVICE PROVIDER.—The term
14 “cloud service provider” has the meaning given the
15 term in section 3607(b) of title 44, United States
16 Code.

17 (5) COMPREHENSIVE ASSESSMENT.—The term
18 “comprehensive assessment” means a comprehensive
19 assessment conducted pursuant to section 3(a).

20 (6) DIRECTOR.—The term “Director” means
21 the Director of the Office of Management and Budg-
22 et.

23 (7) INTELLIGENCE COMMUNITY.—The term
24 “intelligence community” has the meaning given the

1 term in section 3 of the National Security Act of
2 1947 (50 U.S.C. 3003).

3 (8) PLAN.—The term “plan” means the plan
4 developed by a Chief Information Officer, or equiva-
5 lent official, pursuant to section 4(a).

6 (9) SOFTWARE ENTITLEMENT.—The term
7 “software entitlement” means any software that—

8 (A) has been purchased, leased, or licensed
9 by or billed to an agency under any contract or
10 other business arrangement; and

11 (B) is subject to use limitations.

12 (10) SOFTWARE INVENTORY.—The term “soft-
13 ware inventory” means the software inventory of an
14 agency required pursuant to—

15 (A) section 2(b)(2)(A) of the Making Elec-
16 tronic Government Accountable By Yielding
17 Tangible Efficiencies Act of 2016 (40 U.S.C.
18 11302 note; Public Law 114–210); or

19 (B) subsequent guidance issued by the Di-
20 rector pursuant to that Act.

21 **SEC. 3. SOFTWARE INVENTORY UPDATE AND EXPANSION.**

22 (a) IN GENERAL.—As soon as practicable, and not
23 later than 18 months after the date of enactment of this
24 Act, the Chief Information Officer of each agency, in con-
25 sultation with the Chief Financial Officer, the Chief Ac-

1quisition Officer, the Chief Data Officer, and General
2 Counsel of the agency, or the equivalent officials of the
3 agency, shall complete a comprehensive assessment of the
4 software paid for by, in use at, or deployed throughout
5 the agency, which shall include—

6 (1) the current software inventory of the agen-
7 cy, including software entitlements, contracts and
8 other agreements or arrangements of the agency,
9 and a list of the largest software entitlements of the
10 agency separated by provider and category of soft-
11 ware;

12 (2) a comprehensive, detailed accounting of—

13 (A) any software used by or deployed with-
14 in the agency, including software developed or
15 built by the agency, or by another agency for
16 use by the agency, including shared services, as
17 of the date of the comprehensive assessment,
18 including, to the extent identifiable, the con-
19 tracts and other agreements or arrangements
20 used by the agency to acquire, build, deploy, or
21 use such software;

22 (B) information and data on software enti-
23 tlements, which shall include information on
24 any additional fees or costs, including fees or
25 costs for the use of cloud services, that are not

1 included in the initial costs of the contract,
2 agreement, or arrangement—

3 (i) for which the agency pays;

4 (ii) that are not deployed or in use by
5 the agency; and

6 (iii) that are billed to the agency
7 under any contract or business arrange-
8 ment that creates duplication, or are other-
9 wise determined to be unnecessary by the
10 Chief Information Officer of the agency, or
11 the equivalent official, in the deployment
12 or use by the agency; and

13 (C) the extent—

14 (i) to which any software paid for, in
15 use, or deployed throughout the agency is
16 interoperable; and

17 (ii) of the efforts of the agency to im-
18 prove interoperability of software assets
19 throughout the agency enterprise;

20 (3) a categorization of software entitlements of
21 the agency by cost, volume, and type of software;

22 (4) a list of any provisions in the software enti-
23 tlements of the agency that may restrict how the
24 software can be deployed, accessed, or used, includ-
25 ing any such restrictions on desktop or server hard-

1 ware, through a cloud service provider, or on data
2 ownership or access; and

3 (5) an analysis addressing—

4 (A) the accuracy and completeness of the
5 comprehensive assessment;

6 (B) agency management of and compliance
7 with all contracts or other agreements or ar-
8 rangements that include or reference software
9 entitlements or software management within
10 the agency;

11 (C) the extent to which the agency accu-
12 rately captures the total cost of software enti-
13 tlements and related costs, including the total
14 cost of upgrades over the life of a contract,
15 cloud usage costs, and any other cost associated
16 with the maintenance or servicing of contracts;
17 and

18 (D) compliance with software license man-
19 agement policies of the agency.

20 (b) CONTRACT SUPPORT.—

21 (1) AUTHORITY.—The head of an agency may
22 enter into 1 or more contracts to support the re-
23 quirements of subsection (a).

24 (2) NO CONFLICT OF INTEREST.—Contracts
25 under paragraph (1) shall not include contractors

1 with organizational conflicts of interest, within the
2 meaning given that term under subpart 9.5 of the
3 Federal Acquisition Regulation.

4 (3) OPERATIONAL INDEPENDENCE.—Over the
5 course of a comprehensive assessment, contractors
6 hired pursuant to paragraph (1) shall maintain oper-
7 ational independence from the integration, manage-
8 ment, and operations of the software inventory and
9 software entitlements of the agency.

10 (c) SUBMISSION.—On the date on which the Chief In-
11 formation Officer, Chief Financial Officer, Chief Acquisi-
12 tion Officer, the Chief Data Officer, and General Counsel
13 of an agency, or the equivalent officials of the agency,
14 complete the comprehensive assessment, the Chief Infor-
15 mation Officer shall submit the comprehensive assessment
16 to the head of the agency.

17 (d) SUBSEQUENT SUBMISSION.—Not later than 30
18 days after the date on which the head of an agency re-
19 ceives the comprehensive assessment under subsection (c),
20 the head of the agency shall submit the comprehensive as-
21 sessment to—

22 (1) the Director;

23 (2) the Administrator;

24 (3) the Comptroller General of the United
25 States;

1 (4) the Committee on Homeland Security and
2 Governmental Affairs of the Senate; and

3 (5) the Committee on Oversight and Account-
4 ability of the House of Representatives.

5 (e) CONSULTATION.—In order to ensure the utility
6 and standardization of the comprehensive assessment of
7 each agency, including to support the development of each
8 plan and the report required under section 4(e)(2), the
9 Director, in consultation with the Administrator, shall
10 share information, best practices, and recommendations
11 relating to the activities performed in the course of a com-
12 prehensive assessment of an agency.

13 (f) INTELLIGENCE COMMUNITY.—For each element
14 of the intelligence community, a comprehensive assess-
15 ment described under subsection (a) shall be—

16 (1) conducted separately;

17 (2) performed only by an entity designated by
18 the head of the element of the intelligence commu-
19 nity, in accordance with appropriate applicable laws;

20 (3) performed in such a manner as to ensure
21 appropriate protection of information which, if dis-
22 closed, may adversely affect national security; and

23 (4) submitted in summary form, not later than
24 30 days after the date on which the head of the ele-
25 ment of the intelligence community receives the as-

1 assessment, by the head of the element of the intel-
2 ligence community to—

3 (A) the Director;

4 (B) the Select Committee on Intelligence
5 of the Senate; and

6 (C) the Permanent Select Committee on
7 Intelligence of the House of Representatives.

8 **SEC. 4. SOFTWARE MODERNIZATION PLANNING AT AGEN-**
9 **CIES.**

10 (a) IN GENERAL.—The Chief Information Officer of
11 each agency, in consultation with the Chief Financial Offi-
12 cer, the Chief Acquisition Officer, the Chief Data Officer,
13 and the General Counsel of the agency, or the equivalent
14 officials of the agency, shall use the information developed
15 pursuant to the comprehensive assessment of the agency
16 to develop a plan for the agency—

17 (1) to consolidate software entitlements of the
18 agency;

19 (2) to ensure that, in order to improve the per-
20 formance of, and reduce unnecessary costs to, the
21 agency, the Chief Information Officer, Chief Data
22 Officer, and Chief Acquisition Officer of the agency,
23 or the equivalent officers, develop criteria and proce-
24 dures for how the agency will adopt cost-effective ac-
25 quisition strategies, including enterprise licensing,

1 across the agency that reduce costs, eliminate excess
2 licenses, and improve performance; and

3 (3) to restrict the ability of a bureau, program,
4 component, or operational entity within the agency
5 to acquire, use, develop, or otherwise leverage any
6 software entitlement (or portion thereof) without the
7 approval of the Chief Information Officer of the
8 agency, in consultation with the Chief Acquisition
9 Officer of the agency, or the equivalent officers of
10 the agency.

11 (b) PLAN REQUIREMENTS.—The plan of an agency
12 shall—

13 (1) include a detailed strategy for—

14 (A) the remediation of any software asset
15 management deficiencies found during the com-
16 prehensive assessment of the agency;

17 (B) the ongoing maintenance of software
18 asset management upon the completion of the
19 remediation;

20 (C) automation of software license man-
21 agement processes and incorporation of dis-
22 covery tools across the agency;

23 (D) ensuring that officers and employees
24 of the agency are adequately trained in the poli-
25 cies, procedures, rules, regulations, and guid-

1 ance relating to the software acquisition and
2 development of the agency before entering into
3 any agreement relating to any software entitle-
4 ment (or portion thereof) for the agency, in-
5 cluding training on—

6 (i) negotiating options within con-
7 tracts to address and minimize provisions
8 that restrict how the agency may deploy,
9 access, or use the software, including re-
10 strictions on deployment, access, or use on
11 desktop or server hardware and restric-
12 tions on data ownership or access;

13 (ii) the differences between acquiring
14 commercial software products and services
15 and acquiring or building custom software;
16 and

17 (iii) determining the costs of different
18 types of licenses and options for adjusting
19 licenses to meet increasing or decreasing
20 demand; and

21 (E) maximizing the effectiveness of soft-
22 ware deployed by the agency, including, to the
23 extent practicable, leveraging technologies
24 that—

1 (i) measure actual software usage via
2 analytics that can identify inefficiencies to
3 assist in rationalizing software spending;

4 (ii) allow for segmentation of the user
5 base;

6 (iii) support effective governance and
7 compliance in the use of software; and

8 (iv) support interoperable capabilities
9 between software;

10 (2) identify categories of software the agency
11 could prioritize for conversion to more cost-effective
12 software licenses, including enterprise licenses, as
13 the software entitlements, contracts, and other
14 agreements or arrangements come up for renewal or
15 renegotiation;

16 (3) provide an estimate of the costs to move to-
17 ward more enterprise, open-source, or other licenses
18 that do not restrict the use of software by the agen-
19 cy, and the projected cost savings, efficiency meas-
20 ures, and improvements to agency performance
21 throughout the total software lifecycle;

22 (4) identify potential mitigations to minimize
23 software license restrictions on how such software
24 can be deployed, accessed, or used, including any
25 mitigations that would minimize any such restric-

1 tions on desktop or server hardware, through a cloud
2 service provider, or on data ownership or access;

3 (5) ensure that the purchase by the agency of
4 any software is based on publicly available criteria
5 that are not unduly structured to favor any specific
6 vendor, unless prohibited by law (including regula-
7 tion);

8 (6) include any estimates for additional re-
9 sources, services, or support the agency may need to
10 implement the plan;

11 (7) provide information on the prevalence of
12 software products in use across multiple software
13 categories; and

14 (8) include any additional information, data, or
15 analysis determined necessary by the Chief Informa-
16 tion Officer, or other equivalent official, of the agen-
17 cy.

18 (c) SUPPORT.—The Chief Information Officer, or
19 other equivalent official, of an agency may request support
20 from the Director and the Administrator for any analysis
21 or developmental needs to create the plan of the agency.

22 (d) AGENCY SUBMISSION.—

23 (1) IN GENERAL.—Not later than 1 year after
24 the date on which the head of an agency submits the
25 comprehensive assessment pursuant to section 3(d),

1 the head of the agency shall submit to the Director,
2 the Committee on Homeland Security and Govern-
3 mental Affairs of the Senate, and the Committee on
4 Oversight and Accountability of the House of Rep-
5 resentatives the plan of the agency.

6 (2) INTELLIGENCE COMMUNITY.—Not later
7 than 1 year after the date on which the head of an
8 element of the intelligence community submits the
9 summary assessment pursuant to section 3(f)(4), the
10 head of the element shall separately submit the plan
11 of the element to the Director, the Select Committee
12 on Intelligence of the Senate, and the Permanent
13 Select Committee on Intelligence of the House of
14 Representatives.

15 (e) CONSULTATION AND COORDINATION.—The Di-
16 rector—

17 (1) in coordination with the Administrator, the
18 Chief Information Officers Council, the Chief Acqui-
19 sition Officers Council, the Chief Data Officers
20 Council, the Chief Financial Officers Council, and
21 other government and industry representatives iden-
22 tified by the Director, shall establish processes,
23 using existing reporting functions, as appropriate, to
24 identify, define, and harmonize common definitions,
25 terms and conditions, standardized requirements,

1 and other information and criteria to support agency
2 heads in developing and implementing the plans re-
3 quired by this section; and

4 (2) in coordination with the Administrator, and
5 not later than 2 years after the date of enactment
6 of this Act, submit to the Committee on Homeland
7 Security and Governmental Affairs of the Senate
8 and the Committee on Oversight and Accountability
9 of the House of Representatives a report detailing
10 recommendations to leverage Government procure-
11 ment policies and practices with respect to software
12 acquired by, developed by, deployed within, or in use
13 at 1 or more agencies to—

14 (A) increase the interoperability of soft-
15 ware licenses, including software entitlements
16 and software built by Government agencies;

17 (B) consolidate licenses, as appropriate;

18 (C) reduce costs;

19 (D) improve performance; and

20 (E) modernize the management and over-
21 sight of software entitlements and software
22 built by Government agencies, as identified
23 through an analysis of agency plans.

1 **SEC. 5. GAO REPORT.**

2 Not later than 3 years after the date of enactment
3 of this Act, the Comptroller General of the United States
4 shall submit to the Committee on Homeland Security and
5 Governmental Affairs of the Senate and the Committee
6 on Oversight and Accountability of the House of Rep-
7 resentatives a report on—

8 (1) Government-wide trends in agency software
9 asset management practices;

10 (2) comparisons of software asset management
11 practices among agencies;

12 (3) the establishment by the Director of proc-
13 esses to identify, define, and harmonize common
14 definitions, terms, and conditions under section 4(e);

15 (4) agency compliance with the restrictions on
16 contract support under section 3(b); and

17 (5) other analyses of and findings regarding the
18 plans of agencies, as determined by the Comptroller
19 General of the United States.

20 **SEC. 6. NO ADDITIONAL FUNDS.**

21 No additional funds are authorized to be appro-
22 priated for the purpose of carrying out this Act.