

118TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

To advance Federal Government innovation through the implementation and use of multi-cloud computing software technology, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

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Mr. DAINES (for himself and Ms. ROSEN) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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## A BILL

To advance Federal Government innovation through the implementation and use of multi-cloud computing software technology, 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 “Multi-Cloud Innovation  
5 and Advancement Act of 2023”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

8 (1) AGENCY.—The term “agency” has the  
9 meaning given the term in section 3502 of title 44,  
10 United States Code.

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

6           (3) COMPTROLLER GENERAL.—The term  
7 “Comptroller General” means the Comptroller Gen-  
8 eral of the United States.

9           (4) DIRECTOR.—The term “Director” means  
10 the Director of the Office of Management and Budg-  
11 et.

12           (5) INFORMATION AND COMMUNICATIONS  
13 TECHNOLOGY.—The term “information and commu-  
14 nications technology”—

15                 (A) has the meaning given the term in  
16                 subpart 2.101 of the Federal Acquisition Regu-  
17                 lation, or any successor regulation; and

18                 (B) includes associated services.

19           (6) MULTI-CLOUD TECHNOLOGY.—The term  
20 “multi-cloud technology” means architecture and  
21 services that allow for data, application, and pro-  
22 gram portability, usability, and interoperability be-  
23 tween infrastructure, platforms, and hosted applica-  
24 tions of multiple cloud computing vendors and be-  
25 tween public, private, and edge cloud environments

1 in a manner that securely delivers operational and  
2 management consistency, comprehensive visibility,  
3 and resiliency.

4 (7) RELEVANT COMMITTEES OF CONGRESS.—  
5 The term “relevant committees of Congress” means  
6 the Committee on Homeland Security and Govern-  
7 mental Affairs of the Senate and the Committee on  
8 Oversight and Accountability of the House of Rep-  
9 resentatives.

10 **SEC. 3. USE OF MULTI-CLOUD TECHNOLOGY.**

11 (a) IN GENERAL.—Not later than 1 year after the  
12 date of enactment of this Act, the Director, in consultation  
13 with the Administrator of General Services, the Director  
14 of the National Institute of Standards and Technology,  
15 the Secretary of Homeland Security, the Administrator of  
16 the United States Digital Service, and the Administrator  
17 of the Office of Electronic Government, shall—

18 (1) identify and evaluate any impediments to  
19 the adoption of multi-cloud technology by agencies;

20 (2) identify best practices for how agencies can  
21 implement multi-cloud technology to allow for data  
22 portability and interoperability across multiple cloud  
23 computing vendors;

1           (3) evaluate the adoption by agencies of cyber-  
2 security frameworks to support multi-cloud tech-  
3 nology; and

4           (4) develop written guidance for agencies based  
5 on the results of the identification described in para-  
6 graph (2) that—

7                 (A) describes how agencies should use  
8 multi-cloud technology to allow for applications,  
9 data, and programs to be portable and inter-  
10 operable between public, private, and edge cloud  
11 environments; and

12                 (B) outlines a roadmap for the implemen-  
13 tation of multi-cloud technology across agencies  
14 not later than January 1, 2025.

15         (b) BRIEFING.—Not later than 1 year after the date  
16 of enactment of this Act, the Director shall submit to the  
17 relevant committees of Congress—

18                 (1) a copy of the written guidance developed  
19 under subsection (a)(4);

20                 (2) a briefing on the implementation of multi-  
21 cloud technology by agencies; and

22                 (3) any recommendations relating to the expan-  
23 sion or extension of the implementation described in  
24 paragraph (2).

1 **SEC. 4. WORKFORCE DEVELOPMENT STUDY AND TECH-**  
2 **NICAL CAPABILITIES ASSESSMENT.**

3 (a) IN GENERAL.—Not later than 1 year after the  
4 date of enactment of this Act, the Comptroller General  
5 shall submit to Congress and make publicly available a  
6 report that—

7 (1) assesses the state of the digital skills and  
8 expertise gap within the Federal workforce relating  
9 to information and communications technology, with  
10 particular attention to the skills and expertise gap  
11 relating to cloud computing and multi-cloud tech-  
12 nology;

13 (2) assesses the capability of the Federal acqui-  
14 sition workforce to effectively research, solicit, evalu-  
15 ate, acquire, and manage multi-cloud technology  
16 from vendors, with particular attention to flexible or  
17 modular contracting practices that facilitate the in-  
18 herently complex and dynamic nature of multi-cloud  
19 technology procurement;

20 (3) estimates any costs associated with addi-  
21 tional Federal workforce training as a result of the  
22 increased adoption of multi-cloud technologies; and

23 (4) includes any recommendations to address  
24 any gap identified as a result of the assessment de-  
25 scribed in paragraph (1) relating to—

1 (A) Federal workforce development activi-  
2 ties, including training, certifications, staffing  
3 levels, and partnerships; and

4 (B) policies and hiring practices for agen-  
5 cies.

6 (b) TECHNICAL ASSESSMENT.—Not later than 1 year  
7 after the date of enactment of this Act, the Comptroller  
8 General shall submit to Congress and make publicly avail-  
9 able a report that—

10 (1) assesses the technical capabilities of existing  
11 agency networks to support multi-cloud technology;

12 (2) evaluates any technical capability impedi-  
13 ments of agencies that delay the adoption of multi-  
14 cloud technology; and

15 (3) includes any recommendations relating to  
16 policies and best practices for agencies to address  
17 any impediments identified as a result of the assess-  
18 ment described in paragraph (1) and the evaluation  
19 described in paragraph (2).

20 **SEC. 5. REPORT TO CONGRESS.**

21 Not later than 2 years after the date of enactment  
22 of this Act, the Comptroller General shall submit to Con-  
23 gress and make publicly available a report assessing how  
24 agencies have implemented the guidance developed under  
25 section 3(a)(4) to deploy and secure multi-cloud tech-

- 1 nology architecture that includes multiple cloud computing
- 2 software vendors.