

116TH CONGRESS  
1ST SESSION

# H. R. 3093

To establish acquisition pathways for software applications and software upgrades and software development and software acquisition training and management programs for the Department of Defense, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JUNE 4, 2019

Ms. SLOTKIN introduced the following bill; which was referred to the  
Committee on Armed Services

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## A BILL

To establish acquisition pathways for software applications and software upgrades and software development and software acquisition training and management programs for the Department of Defense, 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 “Creating Opportunities  
5 through Defense Engineering Requirements Act of 2019”  
6 or the “CODER Act of 2019”.

1 **SEC. 2. ESTABLISHMENT OF ACQUISITION PATHWAYS FOR**  
2 **SOFTWARE APPLICATIONS AND SOFTWARE**  
3 **UPGRADES.**

4 (a) **GUIDANCE REQUIRED.**—Not later than March 1,  
5 2020, the Secretary of Defense shall establish guidance  
6 authorizing the use of acquisition pathways described in  
7 subsection (b) for the rapid acquisition of software appli-  
8 cations and software upgrades that are intended to be  
9 fielded within one year. A contract awarded under this sec-  
10 tion—

11 (1) shall be in an amount equal to or less than  
12 \$50,000,000; and

13 (2) may be entered into for a period of not  
14 more than one year.

15 (b) **SOFTWARE ACQUISITION PATHWAYS.**—The guid-  
16 ance required by subsection (a) shall provide for the use  
17 of the following two acquisition pathways:

18 (1) **APPLICATIONS.**—The applications pathway  
19 shall provide for the use of rapid development and  
20 implementation of software applications to be used  
21 with commercially available hardware.

22 (2) **UPGRADES.**—The upgrades pathway shall  
23 provide for the rapid development and insertion of  
24 software upgrades for embedded weapon systems or  
25 another hardware system solely used by the Depart-  
26 ment of Defense.

1 (c) GENERAL REQUIREMENTS.—The guidance re-  
2 quired by subsection (a) shall provide for—

3 (1) the use of proven technologies and solutions  
4 to continuously engineer, update, and deliver capa-  
5 bilities in software; and

6 (2) a streamlined and coordinated require-  
7 ments, budget, and acquisition process that results  
8 in the rapid fielding of software applications and  
9 software upgrades.

10 (d) EXPEDITED PROCESS.—

11 (1) IN GENERAL.—An acquisition conducted  
12 under the guidance required by subsection (a) shall  
13 not be subject to the Joint Capabilities Integration  
14 and Development System Manual and Department  
15 of Defense Directive 5000.01, except to the extent  
16 specifically provided in such guidance.

17 (2) REQUIREMENTS PROCESS.—The guidance  
18 required by subsection (a) shall provide that the re-  
19 quirements for acquisition of software applications  
20 and software upgrades—

21 (A) are developed, refined, and prioritized  
22 on an iterative basis through continuous partici-  
23 pation and collaboration by users, testers, and  
24 requirements authorities;

1 (B) include an identification of the need  
2 for, and users of, the software to be acquired  
3 and a rationale for how the software will sup-  
4 port increased efficiency of the Department of  
5 Defense;

6 (C) are stated in the form of a summary-  
7 level list of vulnerabilities in existing software  
8 systems and desired features or capabilities of  
9 the software to be acquired; and

10 (D) consider issues related to lifecycle  
11 costs, systems interoperability, and logistics  
12 support if the developer of the software to be  
13 acquired stops providing support.

14 (3) EXECUTION OF RAPID ACQUISITIONS.—The  
15 Secretary shall ensure that—

16 (A) an acquisition conducted under the  
17 guidance required by subsection (a) is sup-  
18 ported by an entity capable of regular auto-  
19 mated testing of the source code of the software  
20 to be acquired and that such entity is author-  
21 ized to buy storage, bandwidth, and computing  
22 capability as necessary;

23 (B) the Department of Defense can collect  
24 and analyze the testing data described in sub-

1 paragraph (A) to make decisions regarding soft-  
2 ware acquisition and oversight;

3 (C) the Director of Operational Test and  
4 Evaluation and the project manager appointed  
5 under paragraph (5) design test cases to ensure  
6 that the entity described in subparagraph (A)  
7 can test the software to be acquired to ensure  
8 such software meets the requirements of the  
9 contract;

10 (D) the project manager appointed under  
11 paragraph (5) closely monitors the progress of  
12 an acquisition conducted under the guidance re-  
13 quired by subsection (a);

14 (E) an independent cost estimate is con-  
15 ducted that considers—

16 (i) the iterative process of the develop-  
17 ment of the software to be acquired; and

18 (ii) the long-term value of the soft-  
19 ware to be acquired to the Department of  
20 Defense, not based on the value of indi-  
21 vidual lines of source code of the software;

22 (F) the performance of fielded versions of  
23 the software to be acquired are demonstrated  
24 and evaluated in an operational environment;  
25 and

1           (G) performance metrics of the software to  
2           be acquired, such as metrics relating to when  
3           the software can be fielded, delivery capabilities  
4           of the software (including speed of recovery  
5           from outages and cybersecurity vulnerabilities),  
6           and assessments and estimations of the size  
7           and complexity of such software, are automati-  
8           cally generated on a continuous basis and made  
9           available to the Department of Defense and the  
10          congressional defense committees.

11          (4) ADMINISTRATION OF SOFTWARE ACQUI-  
12          TION PATHWAYS.—The guidance required by sub-  
13          section (a) may provide for the use of any of the fol-  
14          lowing streamlined procedures:

15                (A) The service acquisition executive of the  
16                military department concerned shall appoint a  
17                project manager for each acquisition of software  
18                applications and software upgrades, as deter-  
19                mined by the service acquisition executive. Such  
20                project manager shall be appointed from among  
21                civilian employees or members of the Armed  
22                Forces who have significant and relevant expe-  
23                rience in current software processes.

24                (B) Each project manager shall report  
25                with respect to such acquisition directly, and

1 without intervening review or approval, to the  
2 service acquisition executive of the military de-  
3 partment concerned.

4 (C) The service acquisition executive of the  
5 military department concerned shall evaluate  
6 the job performance of such manager on an an-  
7 nual basis. In conducting an evaluation under  
8 this paragraph, a service acquisition executive  
9 shall consider the extent to which the manager  
10 has achieved the objectives of the acquisition  
11 for which the manager is responsible, including  
12 quality, timeliness, and cost objectives.

13 (D) The project manager shall be author-  
14 ized staff positions for a technical staff, includ-  
15 ing experts in software engineering to enable  
16 the manager to manage the acquisition without  
17 the technical assistance of another organiza-  
18 tional unit of an agency to the maximum extent  
19 practicable.

20 (E) The project manager shall be author-  
21 ized, in coordination with the users and testers  
22 of the software to be acquired, to make trade-  
23 offs among lifecycle costs, requirements, and  
24 schedules to meet the goals of the acquisition.

1           (F) The service acquisition executive or the  
2 Under Secretary of Defense for Acquisition and  
3 Sustainment, as applicable, shall serve as the  
4 decision authority for the acquisition.

5           (G) The project manager of a defense  
6 streamlined acquisition shall be provided a  
7 process to expeditiously seek a waiver from  
8 Congress from any statutory or regulatory re-  
9 quirement that the project manager determines  
10 adds little or no value to the management of  
11 the acquisition.

12 (e) CONTRACT TERMS.—

13           (1) IN GENERAL.—A contract entered into pur-  
14 suant to the guidance required by subsection (a)—

15           (A) may be awarded within a 90-day pe-  
16 riod after solicitation on the basis of—

17           (i) statements of qualifications and  
18 past performance data submitted by  
19 offerors; and

20           (ii) discussions with two or more  
21 qualified offerors without regard to price;

22           (B) may be a time-and-materials contract;

23           (C) shall be treated as a contract for the  
24 acquisition of commercial services (as defined in



1 section 103a of title 41, United States Code, as  
2 in effect on January 1, 2020);

3 (D) shall identify the individuals to per-  
4 form the work of the contract, and such individ-  
5 uals may not be replaced without the advance  
6 written consent of the contracting officer; and

7 (E) may allow for a contractor performing  
8 the work of the contract to review existing soft-  
9 ware in consultation with the user community  
10 and incorporate user feedback to—

11 (i) define and prioritize software re-  
12 quirements; and

13 (ii) design and implement new soft-  
14 ware applications and software upgrades.

15 (2) OPTIONS.—A contract entered into pursu-  
16 ant to the guidance required by subsection (a) may  
17 contain an option to extend the contract once, for a  
18 period not to exceed one year, to complete the imple-  
19 mentation of one or more specified software applica-  
20 tions and software upgrades identified during the  
21 period of the initial contract. Such an option may  
22 not be in an amount greater than \$100,000,000  
23 and—

24 (A) if the option is a time-and-materials  
25 contract, it shall be treated as a contract for

1 the acquisition of commercial services (as de-  
2 fined in section 103a of title 41, United States  
3 Code); and

4 (B) if the option is a fixed-price contract,  
5 it shall be treated as a contract for the acquisi-  
6 tion of commercial products (as defined in sec-  
7 tion 103 of title 41, United States Code).

8 (f) RULE OF CONSTRUCTION.—Nothing in this sec-  
9 tion shall be deemed to prevent the use of other methods  
10 of acquisition to procure software applications and up-  
11 grades.

12 (g) CONFORMING AMENDMENT.—Section 2430(a)(2)  
13 of title 10, United States Code, is amended—

14 (1) in subparagraph (A), by striking “or” at  
15 the end;

16 (2) in subparagraph (B), by striking the period  
17 at the end and inserting “; or”; and

18 (3) by adding at the end the following new sub-  
19 paragraph:

20 “(C) an acquisition program for software  
21 applications and software upgrades carried out  
22 using the acquisition guidance issued pursuant  
23 to the CODER Act of 2019.”.

1 **SEC. 3. SOFTWARE DEVELOPMENT AND SOFTWARE ACQUI-**  
2 **SITION TRAINING AND MANAGEMENT PRO-**  
3 **GRAMS.**

4 (a) ESTABLISHMENT OF SOFTWARE DEVELOPMENT  
5 AND SOFTWARE ACQUISITION TRAINING AND MANAGE-  
6 MENT PROGRAMS.—

7 (1) IN GENERAL.—The Secretary of Defense,  
8 acting through the Under Secretary of Defense for  
9 Acquisition and Sustainment and in consultation  
10 with the Under Secretary of Defense for Research  
11 and Engineering and the Chief Information Officer  
12 of the Department of Defense, shall establish soft-  
13 ware development and software acquisition training  
14 and management programs for all software acquisi-  
15 tion professionals, software developers, and other ap-  
16 propriate individuals, as determined by the Secretary  
17 of Defense to earn a certification in software devel-  
18 opment and software acquisition.

19 (2) PROGRAM CONTENTS.—The programs es-  
20 tablished under paragraph (1) shall—

21 (A) develop and expand the use of special-  
22 ized training programs for chief information of-  
23 ficers of the military departments and the De-  
24 fense Agencies, service acquisition executives,  
25 program executive officers, and program man-  
26 agers to include training on and experience in—

1 (i) continuous software development;

2 and

3 (ii) acquisition pathways available to

4 acquire software;

5 (B) ensure program managers for major

6 defense acquisition programs, defense business

7 systems, and other software programs of the

8 Department of Defense—

9 (i) have demonstrated competency in

10 current software processes;

11 (ii) have the skills to lead a workforce

12 that can quickly meet challenges, use soft-

13 ware tools that prioritize continuous or fre-

14 quent upgrades as such tools become avail-

15 able, take up opportunities provided by

16 new innovations, and plan software activi-

17 ties in short iterations to learn from risks

18 of software testing; and

19 (iii) have the experience and training

20 to delegate technical oversight and execu-

21 tion decisions; and

22 (C) include continuing education courses

23 and experiential training to help individuals

24 maintain skills learned through the programs.

25 (b) REPORTS.—

1           (1) REPORTS REQUIRED.—The Secretary shall  
2 submit to the congressional defense committees—

3           (A) not later than 90 days after the date  
4 of the enactment of this Act, an initial report;  
5 and

6           (B) not later than one year after the date  
7 of the enactment of this Act, a final report.

8           (2) CONTENTS.—Each report required under  
9 paragraph (1) shall include—

10           (A) the status of implementing the soft-  
11 ware development and software acquisition  
12 training and management programs established  
13 under subsection (a)(1);

14           (B) a description of the requirements for  
15 certification, including the requirements for  
16 competencies in current software processes;

17           (C) a description of potential career paths  
18 in software development and software acquisi-  
19 tion within the Department of Defense;

20           (D) an independent assessment conducted  
21 by the Defense Innovation Board of the  
22 progress made on implementing the programs  
23 established under subsection (a)(1); and

24           (E) any recommendations for changes to  
25 existing law to facilitate the implementation of

1 the programs established under subsection  
2 (a)(1).

3 (c) DEFINITIONS.—In this section:

4 (1) PROGRAM EXECUTIVE OFFICER; PROGRAM  
5 MANAGER.—The terms “program executive officer”  
6 and “program manager” have the meanings given  
7 those terms, respectively, in section 1737 of title 10,  
8 United States Code.

9 (2) SERVICE ACQUISITION EXECUTIVE.—The  
10 terms “military department”, “Defense Agency”,  
11 and “service acquisition executive” have the mean-  
12 ings given those terms, respectively, in section 101  
13 of title 10, United States Code.

14 (3) MAJOR DEFENSE ACQUISITION PROGRAM.—  
15 The term “major defense acquisition program” has  
16 the meaning given in section 2430 of title 10,  
17 United States Code.

18 (4) DEFENSE BUSINESS SYSTEM.—The term  
19 “defense business system” has the meaning given in  
20 section 2222(i)(1) of title 10, United States Code.

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