Subtitle B—Department of Defense Acquisition Agility

SEC. 805. MODULAR OPEN SYSTEM APPROACH IN DEVELOPMENT OF MAJOR WEAPON SYSTEMS.

- (a) MODULAR OPEN SYSTEM APPROACH.—
- (1) IN GENERAL.—Part IV of subtitle A of title 10, United States Code, is amended by inserting after chapter 144A the following new chapter:

"CHAPTER 144B—WEAPON SYSTEMS DEVELOPMENT AND RELATED MATTERS

"Subchapter	Sec.
"I. Modular Open System Approach in Development of Weapon Sys-	
tems	2446a
"II. Development, Prototyping, and Deployment of Weapon System	
Components and Technology	2447a
"III. Cost, Schedule, and Performance of Major Defense Acquisition	
Programs	2448a

"SUBCHAPTER I—MODULAR OPEN SYSTEM APPROACH IN DEVELOPMENT OF WEAPON SYSTEMS

"Sec. "2446a. Requirement for modular open system approach in major defense acquisi-

tion programs; definitions.

"2446b. Requirement to address modular open system approach in program capa-

bilities development and acquisition weapon system design.

"2446c. Requirements relating to availability of major system interfaces and support for modular open system approach.

"§ 2446a. Requirement for modular open system approach in major defense acquisition programs; definitions

- "(a) Modular Open System Approach Requirement.—A major defense acquisition program that receives Milestone A or Milestone B approval after January 1, 2019, shall be designed and developed, to the maximum extent practicable, with a modular open system approach to enable incremental development and enhance competition, innovation, and interoperability.
 - "(b) DEFINITIONS.—In this chapter:

"(1) The term 'modular open system approach' means, with respect to a major defense acquisition program, an integrated business and technical strategy that-

"(A) employs a modular design that uses major system interfaces between a major system platform and a major system component, between major system components, or between major system platforms;

"(B) is subjected to verification to ensure major system interfaces comply with, if available and suitable, widely

supported and consensus-based standards;

"(C) uses a system architecture that allows severable major system components at the appropriate level to be incrementally added, removed, or replaced throughout the life cycle of a major system platform to afford opportunities for enhanced competition and innovation while yielding-

"(i) significant cost savings or avoidance;

"(ii) schedule reduction;

"(iii) opportunities for technical upgrades;

"(iv) increased interoperability, including system of systems interoperability and mission integration;

"(v) other benefits during the sustainment phase of a major weapon system; and

"(D) complies with the technical data rights set forth

in section 2320 of this title.

"(2) The term 'major system platform' means the highest level structure of a major weapon system that is not physically mounted or installed onto a higher level structure and on which a major system component can be physically mounted or installed.

"(3) The term 'major system component'—

- '(A) means a high level subsystem or assembly, including hardware, software, or an integrated assembly of both, that can be mounted or installed on a major system platform through well-defined major system interfaces; and
- "(B) includes a subsystem or assembly that is likely to have additional capability requirements, is likely to change because of evolving technology or threat, is needed for interoperability, facilitates incremental deployment of capabilities, or is expected to be replaced by another major system component.

"(4) The term 'major system interface'—

"(A) means a shared boundary between a major system platform and a major system component, between major system components, or between major system platforms, defined by various physical, logical, and functional characteristics, such as electrical, mechanical, fluidic, optical, radio frequency, data, networking, or software elements; and

"(B) is characterized clearly in terms of form, function, and the content that flows across the interface in order to enable technological innovation, incremental improve-

ments, integration, and interoperability.

"(5) The term 'program capability document' means, with respect to a major defense acquisition program, a document that specifies capability requirements for the program, such as a capability development document or a capability production

"(6) The terms 'program cost targets' and 'fielding target' have the meanings provided in section 2448a(a) of this title.

"(7) The term 'major defense acquisition program' has the

meaning provided in section 2430 of this title.

"(8) The term 'major weapon system' has the meaning provided in section 2379(f) of this title.

"§ 2446b. Requirement to address modular open system approach in program capabilities development and acquisition weapon system design

"(a) Program Capability Document.—A program capability document for a major defense acquisition program shall identify and characterize-

"(1) the extent to which requirements for system performance are likely to evolve during the life cycle of the system because of evolving technology, threat, or interoperability needs; and

"(2) for requirements that are expected to evolve, the minimum acceptable capability that is necessary for initial operating capability of the major defense acquisition program.

"(b) ANALYSIS OF ALTERNATIVES.—The Director of Cost Assessment and Performance Evaluation, in formulating study guidance for analyses of alternatives for major defense acquisition programs and performing such analyses under section 139a(d)(4) of this title, shall ensure that any such analysis for a major defense acquisition program includes consideration of evolutionary acquisition, prototyping, and a modular open system approach.

"(c) ACQUISITION STRATEGY.—In the case of a major defense acquisition program that uses a modular open system approach, the acquisition strategy required under section 2431a of this title

shall—

"(1) clearly describe the modular open system approach

to be used for the program;

"(2) differentiate between the major system platform and major system components being developed under the program, as well as major system components developed outside the program that will be integrated into the major defense acquisition program;

"(3) clearly describe the evolution of major system components that are anticipated to be added, removed, or replaced

in subsequent increments;

"(4) identify additional major system components that may be added later in the life cycle of the major system platform;

- "(5) clearly describe how intellectual property and related issues, such as technical data deliverables, that are necessary to support a modular open system approach, will be addressed; and
- "(6) clearly describe the approach to systems integration and systems-level configuration management to ensure mission and information assurance.
- "(d) REQUEST FOR PROPOSALS.—The milestone decision authority for a major defense acquisition program that uses a modular open system approach shall ensure that a request for proposals for the development or production phases of the program shall describe the modular open system approach and the minimum set of major system components that must be included in the design of the major defense acquisition program.

"(e) MILESTONE B.—A major defense acquisition program may not receive Milestone B approval under section 2366b of this title until the milestone decision authority determines in writing that—

"(1) in the case of a program that uses a modular open

system approach—

"(A) the program incorporates clearly defined major system interfaces between the major system platform and major system components, between major system components, and between major system platforms;

"(B) such major system interfaces are consistent with the widely supported and consensus-based standards that exist at the time of the milestone decision, unless such standards are unavailable or unsuitable for particular

major system interfaces; and

"(C) the Government has arranged to obtain appropriate and necessary intellectual property rights with respect to such major system interfaces upon completion of the development of the major system platform; or

"(2) in the case of a program that does not use a modular open system approach, that the use of a modular open system approach is not practicable.

"§ 2446c. Requirements relating to availability of major system interfaces and support for modular open system approach

"The Secretary of each military department shall—

"(1) coordinate with the other military departments, the defense agencies, defense and other private sector entities, national standards-setting organizations, and, when appropriate, with elements of the intelligence community with respect to the specification, identification, development, and maintenance of major system interfaces and standards for use in major system platforms, where practicable;

"(2) ensure that major system interfaces incorporate commercial standards and other widely supported consensusbased standards that are validated, published, and maintained by recognized standards organizations to the maximum extent

practicable:

"(3) ensure that sufficient systems engineering and development expertise and resources are available to support the use of a modular open system approach in requirements develop-

ment and acquisition program planning;

"(4) ensure that necessary planning, programming, and budgeting resources are provided to specify, identify, develop, and sustain the modular open system approach, associated major system interfaces, systems integration, and any additional program activities necessary to sustain innovation and

interoperability; and "(5) ensure that adequate training in the use of a modular open system approach is provided to members of the requirements and acquisition workforce.".

(2) CLERICAL AMENDMENT.—The table of chapters for title 10, United States Code, is amended by adding after the item relating to chapter 144A the following new item:

"144B. Weapon Systems Development and Related Matters2446a".

- (3) Conforming amendment.—Section 2366b(a)(3) of such title is amended-
 - (A) by striking "and" at the end of subparagraph (K); and
 - (B) by inserting after subparagraph (L) the following new subparagraph:

"(M) the requirements of section 2446b(e) of this title

- (4) EFFECTIVE DATE.—Subchapter I of chapter 144B of title 10, United States Code, as added by paragraph (1), shall take effect on January 1, 2017.
- (b) REQUIREMENT TO INCLUDE MODULAR OPEN SYSTEM APPROACH IN SELECTED ACQUISITION REPORTS.—Section 2432(c)(1) of such title is amended-
 - (1) by striking "and" at the end of subparagraph (F);

 $\left(2\right)$ by redesignating subparagraph $\left(G\right)$ as subparagraph $\left(H\right);$ and

(3) by inserting after subparagraph (F) the following new

subparagraph (G):

"(G) for each major defense acquisition program that receives Milestone B approval after January 1, 2019, a brief summary description of the key elements of the modular open system approach as defined in section 2446a of this title or, if a modular open system approach was not used, the rationale for not using such an approach; and".

SEC. 806. DEVELOPMENT, PROTOTYPING, AND DEPLOYMENT OF WEAPON SYSTEM COMPONENTS OR TECHNOLOGY.

- (a) DEVELOPMENT, PROTOTYPING, AND DEPLOYMENT OF WEAPON SYSTEM COMPONENTS OR TECHNOLOGY.—
 - (1) IN GENERAL.—Chapter 144B of title 10, United States Code, as added by section 805, is further amended by adding at the end the following new subchapter:

"SUBCHAPTER II—DEVELOPMENT, PROTOTYPING, AND DE-PLOYMENT OF WEAPON SYSTEM COMPONENTS OR TECH-NOLOGY

"Sec.

- "2447a. Weapon system component or technology prototype projects: display of budget information.
- "2447b. Weapon system component or technology prototype projects: oversight.
- "2447c. Requirements and limitations for weapon system component or technology prototype projects.
- "2447d. Mechanisms to speed deployment of successful weapon system component or technology prototypes.

"2447e. Definition of weapon system component.

"\$ 2447a. Weapon system component or technology prototype projects: display of budget information

"(a) REQUIREMENTS FOR BUDGET DISPLAY.—In the defense budget materials for any fiscal year after fiscal year 2017, the Secretary of Defense shall, with respect to advanced component development and prototype activities (within the research, development, test, and evaluation budget), set forth the amounts requested for each of the following:

"(1) Acquisition programs of record.

"(2) Development, prototyping, and experimentation of weapon system components or other technologies, including those based on commercial items and technologies, separate from acquisition programs of record.

"(3) Other budget line items as determined by the Secretary

of Defense.

"(b) ADDITIONAL REQUIREMENTS.—For purposes of subsection (a)(2), the amounts requested for development, prototyping, and experimentation of weapon system components or other technologies shall be—

"(1) structured into either capability, weapon system component, or technology portfolios that reflect the priority areas for prototype projects; and

"(2) justified with general descriptions of the types of capability areas and technologies being funded or expected to be funded during the fiscal year concerned.

"(c) Definitions.—In this section, the terms 'budget' and 'defense budget materials' have the meaning given those terms in section 234 of this title.

"\$ 2447b. Weapon system component or technology prototype projects: oversight

"(a) ESTABLISHMENT.—The Secretary of each military department shall establish an oversight board or identify a similar existing group of senior advisors for managing prototype projects for weapon system components and other technologies and subsystems, including the use of funds for such projects, within the military department concerned.

"(b) MEMBERSHIP.—Each oversight board shall be comprised

of senior officials with—

"(1) expertise in requirements; research, development, test, and evaluation; acquisition; sustainment; or other relevant areas within the military department concerned;

"(2) awareness of technology development activities and opportunities in the Department of Defense, industry, and other

sources; and

"(3) awareness of the component capability requirements of major weapon systems, including scheduling and fielding goals for such component capabilities.

"(c) FUNCTIONS.—The functions of each oversight board are

as follows:

"(1) To issue a strategic plan every three years that prioritizes the capability and weapon system component portfolio areas for conducting prototype projects, based on assessments of—

"(A) high priority warfighter needs;

"(B) capability gaps or readiness issues with major

weapon systems;

"(C) opportunities to incrementally integrate new components into major weapon systems based on commercial technology or science and technology efforts that are expected to be sufficiently mature to prototype within three years; and

"(D) opportunities to reduce operation and support

costs of major weapon systems.

- "(2) To annually recommend funding levels for weapon system component or technology development and prototype projects across capability or weapon system component portfolios.
- "(3) To annually recommend to the service acquisition executive of the military department concerned specific weapon system component or technology development and prototype projects, subject to the requirements and limitations in section 2447c of this title.
- "(4) To ensure projects are managed by experts within the Department of Defense who are knowledgeable in research, development, test, and evaluation and who are aware of opportunities for incremental deployment of component capabilities and other technologies to major weapon systems or directly to support warfighting capabilities.

"(5) To ensure projects are conducted in a manner that allows for appropriate experimentation and technology risk.

"(6) To ensure projects have a plan for technology transition of the prototype into a fielded system, program of record, or operational use, as appropriate, upon successful achievement of technical and project goals.

"(7) To ensure necessary technical, contracting, and financial management resources are available to support each

project.

"(8) To submit to the congressional defense committees a semiannual notification that includes the following:

"(A) each weapon system component or technology prototype project initiated during the preceding six months, including an explanation of each project and its required funding.

"(B) the results achieved from weapon system component prototype and technology projects completed and

tested during the preceding six months.

"\$ 2447c. Requirements and limitations for weapon system component or technology prototype projects

"(a) LIMITATION ON PROTOTYPE PROJECT DURATION.—A prototype project shall be completed within two years of its initiation.

"(b) MERIT-BASED SELECTION PROCESS.—A prototype project shall be selected by the service acquisition executive of the military department concerned through a merit-based selection process that identifies the most promising, innovative, and cost-effective prototypes that address one or more of the elements set forth in subsection (c)(1) of section 2447b of this title and are expected to be successfully demonstrated in a relevant environment.

"(c) Type of Transaction.—Prototype projects shall be funded through contracts, cooperative agreements, or other transactions.

"(d) FUNDING LIMIT.—(1) Each prototype project may not exceed a total amount of \$10,000,000 (based on fiscal year 2017 constant dollars), unless—

"(A) the Secretary of the military department, or the Secretary's designee, approves a larger amount of funding for

the project, not to exceed \$50,000,000; and

"(B) the Secretary, or the Secretary's designee, submits to the congressional defense committees, within 30 days after approval of such funding for the project, a notification that includes—

"(i) the project;

"(ii) expected funding for the project; and

"(iii) a statement of the anticipated outcome of the oject.

"(2) The Secretary of Defense may adjust the amounts (and the base fiscal year) provided in paragraph (1) on the basis of

Department of Defense escalation rates.

"(e) Related Prototype Authorities.—Prototype projects that exceed the duration and funding limits established in this section shall be pursued under the rapid prototyping process established by section 804 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92; 10 U.S.C. 2302 note). In addition, nothing in this subchapter shall affect the authority to carry out prototype projects under section 2371b or any other section of this title related to prototyping.

"\$ 2447d. Mechanisms to speed deployment of successful weapon system component or technology prototypes

"(a) Selection of Prototype Project for Production and Rapid Fielding.—A weapon system component or technology prototype project may be selected by the service acquisition executive of the military department concerned for a follow-on production contract or other transaction without the use of competitive procedures, notwithstanding the requirements of section 2304 of this title, if—

"(1) the follow-on production project addresses a high priority warfighter need or reduces the costs of a weapon system;

"(2) competitive procedures were used for the selection of parties for participation in the original prototype project;

"(3) the participants in the original prototype project successfully completed the requirements of the project; and "(4) a prototype of the system to be procured was dem-

onstrated in a relevant environment.

"(b) SPECIAL TRANSFER AUTHORITY.—(1) The Secretary of a military department may, as specified in advance by appropriations Acts, transfer funds that remain available for obligation in procurement appropriation accounts of the military department to fund the low-rate initial production of the rapid fielding project until required funding for full-rate production can be submitted and approved through the regular budget process of the Department of Defense.

"(2) The funds transferred under this subsection to fund the low-rate initial production of a rapid fielding project shall be for a period not to exceed two years, the amount for such period may not exceed \$50,000,000, and the special transfer authority provided in this subsection may not be used more than once to

fund procurement of a particular new or upgraded system.

"(3) The special transfer authority provided in this subsection is in addition to any other transfer authority available to the

Department of Defense.

"(c) NOTIFICATION TO CONGRESS.—Within 30 days after the service acquisition executive of a military department selects a weapon system component or technology project for a follow-on production contract or other transaction, the service acquisition executive shall notify the congressional defense committees of the selection and provide a brief description of the rapid fielding project.

"§ 2447e. Definition of weapon system component

"In this subchapter, the term 'weapon system component' has the meaning given the term 'major system component' in section 2446a of this title.".

- (2) Effective date.—Subchapter II of chapter 144B of title 10, United States Code, as added by paragraph (1), shall take effect on January 1, 2017.
- (b) ADDITION TO REQUIREMENTS NEEDED BEFORE MILESTONE A APPROVAL.—Section 2366a(b) of such title is amended—

(1) by striking "and" at the end of paragraph (7);

(2) by redesignating paragraph (8) as paragraph (9); and (3) by inserting after paragraph (7) the following new para-

graph (8):

"(8) that, with respect to a program initiated after January
1, 2019, technology shall be developed in the program (after

Milestone A approval) only if the milestone decision authority determines with a high degree of confidence that such development will not delay the fielding target of the program, or, if the milestone decision authority does not make such determination for a major system component being developed under the program, the milestone decision authority ensures that the technology related to the major system component shall be sufficiently matured and demonstrated in a relevant environ-ment (after Milestone A approval) separate from the program using the prototyping authorities in subchapter II of chapter 144B of this title or other authorities, as appropriate, and have an effective plan for adoption or insertion by the relevant program; and".

SEC. 807. COST, SCHEDULE, AND PERFORMANCE OF MAJOR DEFENSE ACQUISITION PROGRAMS.

- (a) Cost, Schedule, and Performance of Major Defense Acquisition Programs.-
 - (1) IN GENERAL.—Chapter 144B of title 10, United States Code, as added by section 805, is amended by adding at the end the following new subchapter:

"SUBCHAPTER III—COST, SCHEDULE, AND PERFORMANCE OF MAJOR DEFENSE ACQUISITION PROGRAMS

"Sec.

"2448a. Program cost, fielding, and performance goals in planning major defense acquisition programs.

"2448b. Independent technical risk assessments.

"§ 2448a. Program cost, fielding, and performance goals in planning major defense acquisition programs

"(a) Program Cost and Fielding Targets.—(1) Before funds are obligated for technology development, systems development, or production of a major defense acquisition program, the Secretary of Defense shall ensure, by establishing the goals described in paragraph (2), that the milestone decision authority for the major defense acquisition program approves a program that will—

"(A) be affordable;

"(B) incorporate program planning that anticipates the evolution of capabilities to meet changing threats, technology insertion, and interoperability; and

"(C) be fielded when needed.

"(2) The goals described in this paragraph are goals for—

"(A) the procurement unit cost and sustainment cost (referred to in this section as the 'program cost targets');

"(B) the date for initial operational capability (referred to in this section as the 'fielding target'); and

- "(C) technology maturation, prototyping, and a modular open system approach to evolve system capabilities and improve interoperability.
- "(b) Delegation.—The responsibilities of the Secretary of Defense in subsection (a) may be delegated only to the Deputy Secretary of Defense.
 - "(c) DEFINITIONS.—In this section:
 - "(1) The term 'procurement unit cost' has the meaning provided in section 2432(a)(2) of this title.

"(2) The term 'initial capabilities document' has the meaning provided in section 2366a(d)(2) of this title.

"§ 2448b. Independent technical risk assessments

"(a) IN GENERAL.—With respect to a major defense acquisition program, the Secretary of Defense shall ensure that an independent technical risk assessment is conducted-

(1) before any decision to grant Milestone A approval for the program pursuant to section 2366a of this title, that identifies critical technologies and manufacturing processes

that need to be matured; and

"(2) before any decision to grant Milestone B approval for the program pursuant to section 2366b of this title, any decision to enter into low-rate initial production or full-rate production, or at any other time considered appropriate by the Secretary, that includes the identification of any critical technologies or manufacturing processes that have not been successfully demonstrated in a relevant environment.

"(b) CATEGORIZATION OF TECHNICAL RISK LEVELS.—The Sec-

retary shall issue guidance and a framework for categorizing the degree of technical and manufacturing risk in a major defense

acquisition program.".

(2) Effective date.—Subchapter III of chapter 144B of title 10, United States Code, as added by paragraph (1), shall apply with respect to major defense acquisition programs that

reach Milestone A after October 1, 2017.
(b) MODIFICATION OF MILESTONE DECISION AUTHORITY.—Effective January 1, 2017, subsection (d) of section 2430 of title 10, United States Code, as added by section 825(a) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92; 129 Stat. 907), is amended-

(1) in paragraph (2)(A), by inserting "subject to paragraph

(5)," before "the Secretary determines"; and

- (2) by adding at the end the following new paragraph: "(5) The authority of the Secretary of Defense to designate an alternative milestone decision authority for a program with respect to which the Secretary determines that the program is addressing a joint requirement, as set forth in paragraph (2)(A), shall apply only for a major defense acquisition program that reaches Milestone A after October 1, 2016, and before October 1, 2019.".
- (c) Adherence to Requirements in Major Defense Acquisi-TION PROGRAMS.—Section 2547 of title 10, United States Code, is amended—
 - (1) by redesignating subsections (b) and (c) as subsections (c) and (d), respectively;
 - (2) by inserting after subsection (a) the following new sub-
- "(b) Adherence to Requirements in Major Defense Acquisi-TION PROGRAMS.—The Secretary of the military department concerned shall ensure that the program capability document supporting a Milestone B or subsequent decision for a major defense acquisition program may not be approved until the chief of the armed force concerned determines in writing that the requirements in the document are necessary and realistic in relation to the program cost and fielding targets established under section 2448a(a) of this title."; and

(3) by adding at the end of subsection (d), as so redesignated, the following new paragraph:

"(3) The term 'program capability document' has the

meaning provided in section 2446a(b)(5) of this title.".

- (d) AMENDMENT RELATING TO DETERMINATION REQUIRED BEFORE MILESTONE A APPROVAL.—Section 2366a(b)(4) of title 10, United States Code, is amended by inserting after "areas of risk" the following: ", including risks determined by the identification of critical technologies required under section 2448b(a)(1) of this title or any other risk assessment".
- (e) AMENDMENT RELATING TO CERTIFICATION REQUIRED BEFORE MILESTONE B APPROVAL.—Section 2366b(a) of title 10, United States Code, is amended—
 - (1) in paragraph (2), by striking "assessment by the Assistant Secretary" and all that follows through "Test and Evaluation" and inserting "technical risk assessment conducted under section 2448b of this title"; and
 - (2) in paragraph (3), as amended by section 805(a)(3)(B)—
 - (A) by striking "and" at the end of subparagraph (C); (B) by redesignating subparagraphs (D) through (M) as subparagraphs (E) through (N), respectively; and

(C) by inserting after subparagraph (C) the following

new subparagraph (D):

"(D) the estimated procurement unit cost for the program and the estimated date for initial operational capability for the baseline description for the program (established under section 2435) do not exceed the program cost and fielding targets established under section 2448a(a) of this title, or, if such estimated cost is higher than the program cost targets or if such estimated date is later than the fielding target, the program cost targets have been increased or the fielding target has been delayed by the Secretary of Defense after a request for such increase or delay by the milestone decision authority;".

SEC. 808. TRANSPARENCY IN MAJOR DEFENSE ACQUISITION PROGRAMS.

(a) MILESTONE A REPORT.—

(1) IN GENERAL.—Section 2366a(c) of title 10, United States Code, is amended to read as follows:

"(c) Submissions to Congress on Milestone A.—

- "(1) Brief summary report.—Not later than 15 days after granting Milestone A approval for a major defense acquisition program, the milestone decision authority for the program shall provide to the congressional defense committees and, in the case of intelligence or intelligence-related activities, the congressional intelligence committees a brief summary report that contains the following elements:
 - "(A) The program cost and fielding targets established by the Secretary of Defense under section 2448a(a) of this title
 - $\mbox{``(B)}$ The estimated cost and schedule for the program established by the military department concerned, including—
 - "(i) the dollar values estimated for the program acquisition unit cost and total life-cycle cost; and

"(ii) the planned dates for each program milestone

and initial operational capability.

"(C) The independent estimated cost for the program established pursuant to section 2334(a)(6) of this title, and any independent estimated schedule for the program,

"(i) as assessment of the major contributors to the program acquisition unit cost and total life-cycle

cost; and
"(ii) the planned dates for each program milestone

and initial operational capability.

- "(D) A summary of the technical or manufacturing risks associated with the program, as determined by the military department concerned, including identification of any critical technologies or manufacturing processes that need to be matured.
- "(E) A summary of the independent technical risk assessment conducted or approved under section 2448b of this title, including identification of any critical technologies or manufacturing processes that need to be matured.
- "(F) A summary of any sufficiency review conducted by the Director of Cost Assessment and Program Evaluation of the analysis of alternatives performed for the program (as referred to in section 2366a(b)(6) of this title).

"(G) Any other information the milestone decision

authority considers relevant.

"(2) ADDITIONAL INFORMATION.—(A) At the request of any of the congressional defense committees or, in the case of intelligence or intelligence-related activities, the congressional intelligence committees, the milestone decision authority shall submit to the committee an explanation of the basis for a determination made under subsection (b) with respect to a major defense acquisition program, together with a copy of the written determination, or further information or underlying documentation for the information in a brief summary report submitted under paragraph (1), including the independent cost and schedule estimates and the independent technical risk assessments referred to in that paragraph.

"(B) The explanation or information shall be submitted in unclassified form, but may include a classified annex.".

(2) Definitions.—Section 2366a(d) of such title is amended by adding at the end the following new paragraphs:

"(8) The term 'fielding target' has the meaning given that term in section 2448a(a) of this title.

"(9) The term 'major system component' has the meaning

given that term in section 2446a(b)(3) of this title.

- "(10) The term 'congressional intelligence committees' has the meaning given that term in section 437(c) of this title.". (b) MILESTONE B REPORT.—
- (1) IN GENERAL.—Section 2366b(c) of title 10, United States Code, is amended to read as follows:

"(c) Submissions to Congress on Milestone B.—

"(1) Brief Summary Report.—Not later than 15 days after granting Milestone B approval for a major defense acquisition program, the milestone decision authority for the program shall provide to the congressional defense committees and, in the case of intelligence or intelligence-related activities, the congressional intelligence committees a brief summary report that contains the following elements:

"(A) The program cost and fielding targets established by the Secretary of Defense under section 2448a(a) of this

title.

"(B) The estimated cost and schedule for the program established by the military department concerned, including—

"(i) the dollar values estimated for the program acquisition unit cost, average procurement unit cost,

and total life-cycle cost; and

"(ii) the planned dates for each program milestone, initial operational test and evaluation, and initial oper-

ational capability.

"(C) The independent estimated cost for the program established pursuant to section 2334(a)(6) of this title, and any independent estimated schedule for the program, including—

"(i) the dollar values and ranges estimated for the program acquisition unit cost, average procurement

unit cost, and total life-cycle cost; and

"(ii) the planned dates for each program milestone, initial operational test and evaluation, and initial oper-

ational capability.

- "(D) A summary of the technical and manufacturing risks associated with the program, as determined by the military department concerned, including identification of any critical technologies or manufacturing processes that have not been successfully demonstrated in a relevant environment.
- "(E) A summary of the independent technical risk assessment conducted or approved under section 2448b of this title, including identification of any critical technologies or manufacturing processes that have not been successfully demonstrated in a relevant environment.

"(F) A statement of whether a modular open system

approach is being used for the program.

"(G) Any other information the milestone decision

authority considers relevant.

"(2) CERTIFICATIONS AND DETERMINATIONS.—(A) The certifications and determination under subsection (a) with respect to a major defense acquisition program shall be submitted to the congressional defense committees with the first Selected Acquisition Report submitted under section 2432 of this title after completion of the certification.

"(B) The milestone decision authority shall retain records of the basis for the certifications and determination under

paragraphs (1), (2), and (3) of subsection (a).

"(3) ADDITIONAL INFORMATION.—(A) At the request of any of the congressional defense committees or, in the case of intelligence or intelligence-related activities, the congressional intelligence committees, the milestone decision authority shall submit to the committee an explanation of the basis for the certifications and determination under paragraphs (1), (2), and (3) of subsection (a) with respect to a major defense acquisition program or further information or underlying documentation

for the information in a brief summary report submitted under paragraph (1), including the independent cost and schedule estimates and the independent technical risk assessments referred to in that paragraph.

"(B) The explanation or information shall be submitted

in unclassified form, but may include a classified annex.".

(2) DEFINITIONS.—Section 2366b(g) of such title is amended by adding at the end the following new paragraphs:

"(6) The term 'fielding target' has the meaning given that

term in section 2448a(a) of this title.

"(7) The term 'major system component' has the meaning given that term in section 2446a(b)(3) of this title.

- "(8) The term 'congressional intelligence committees' has the meaning given that term in section 437(c) of this title.". (c) MILESTONE C REPORT.—
- (1) IN GENERAL.—Chapter 139 of such title is amended by inserting after section 2366b the following new section:

"§ 2366c. Major defense acquisition programs: submissions to Congress on Milestone C

"(a) Brief Summary Report.—Not later than 15 days after granting Milestone C approval for a major defense acquisition program, the milestone decision authority for the program shall provide to the congressional defense committees and, in the case of intelligence or intelligence-related activities, the congressional intelligence committees a brief summary report that contains the following:

"(1) The estimated cost and schedule for the program estab-

lished by the military department concerned, including-

"(A) the dollar values estimated for the program acquisition unit cost, average procurement unit cost, and total life-cycle cost; and

"(B) the planned dates for initial operational test and

evaluation and initial operational capability.

"(2) The independent estimated cost for the program established pursuant to section 2334(a)(6) of this title, and any independent estimated schedule for the program, including-

"(A) the dollar values estimated for the program acquisition unit cost, average procurement unit cost, and

total life-cycle cost; and

(B) the planned dates for initial operational test and

evaluation and initial operational capability.

"(3) A summary of any production, manufacturing, and fielding risks associated with the program.

"(b) ADDITIONAL INFORMATION.—At the request of any of the congressional defense committees or, in the case of intelligence or intelligence-related activities, the congressional intelligence committees, the milestone decision authority shall submit to the committee further information or underlying documentation for the information in a brief summary report submitted under subsection (a), including the independent cost and schedule estimates and the independent technical risk assessments referred to in that subsection.

(c) Congressional Intelligence Committees Defined.—In this section, the term 'congressional intelligence committees' has the meaning given that term in section 437(c) of this title.".

(2) CLERICAL AMENDMENT.—The table of sections at the beginning of such chapter is amended by inserting after the item relating to section 2366b the following new item:

"2366c. Major defense acquisition programs: submissions to Congress on Milestone

SEC. 809. AMENDMENTS RELATING TO TECHNICAL DATA RIGHTS.

(a) Rights Relating to Item or Process Developed Exclu-SIVELY AT PRIVATE EXPENSE.—Subsection (a)(2)(C)(iii) of section 2320 of title 10, United States Code, is amended by inserting after "or process data" the following: ", including such data pertaining to a major system component".

(b) RIGHTS RELATING TO INTERFACE OR MAJOR SYSTEM INTER-FACE.—Subsection (a)(2) of section 2320 of such title is further

amended-

(1) by redesignating subparagraphs (F) and (G) as subpara-

graphs (H) and (I), respectively;

(2) in subparagraph (B), by striking "Except as provided in subparagraphs (C) and (D)," and inserting "Except as pro-

vided in subparagraphs (C), (D), and (G),";

(3) in subparagraph (D)(i)(II), by striking "is necessary" and inserting "is a release, disclosure, or use of technical data pertaining to an interface between an item or process and other items or processes necessary";

- (4) in subparagraph (E)—

 (A) by striking "In the case" and inserting "Except as provided in subparagraphs (F) and (G), in the case";
- (B) by striking "negotiations). The United States shall have" and all that follows through "such negotiated rights shall" and inserting the following: "negotiations) and shall be based on negotiations between the United States and the contractor, except in any case in which the Secretary of Defense determines, on the basis of criteria established in the regulations, that negotiations would not be practicable. The establishment of such rights shall"; and

(5) by inserting after subparagraph (E) the following new

subparagraphs (F) and (G):

- "(F) INTERFACES DEVELOPED WITH MIXED FUNDING.—Notwithstanding subparagraph (E), the United States shall have government purpose rights in technical data pertaining to an interface between an item or process and other items or processes that was developed in part with Federal funds and in part at private expense, except in any case in which the Secretary of Defense determines, on the basis of criteria established in the regulations, that negotiation of different rights in such technical data would be in the best interest of the United States.
- "(G) Major system interfaces developed exclusively AT PRIVATE EXPENSE OR WITH MIXED FUNDING.—Notwithstanding subparagraphs (B) and (E), the United States shall have government purpose rights in technical data pertaining to a major system interface developed exclusively at private expense or in part with Federal funds and in part at private expense and used in a modular open system approach pursuant to section 2446a of this title, except in any case in which

the Secretary of Defense determines that negotiation of different rights in such technical data would be in the best interest of the United States. Such major system interface shall be identified in the contract solicitation and the contract. For technical data pertaining to a major system interface developed exclusively at private expense for which the United States asserts government purpose rights, the Secretary of Defense shall negotiate with the contractor the appropriate and reasonable compensation for such technical data."

(c) AMENDMENT RELATING TO DEFERRED ORDERING.—Sub-

section (b)(9) of section 2320 of such title is amended—

(1) by striking "at any time" and inserting ", until the date occurring six years after acceptance of the last item (other than technical data) under a contract or the date of contract termination, whichever is later,";

(2) by striking "or utilized in the performance of a contract"

and inserting "in the performance of the contract"; and

(3) by striking clause (ii) of subparagraph (B) and inserting the following:

"(ii) is described in subparagraphs (D)(i)(II), (F),

and (G) of subsection (a)(2); and".

- (d) Definitions.—Section 2320 of such title is further amended—
 - (1) in subsection (f), by inserting "COVERED GOVERNMENT SUPPORT CONTRACTOR DEFINED.—" before "In this section"; and
- (2) by adding at the end the following new subsection: "(g) ADDITIONAL DEFINITIONS.—In this section, the terms 'major system component', 'major system interface', and 'modular open system approach' have the meanings provided in section 2446a of this title.".
- (e) AMENDMENTS TO ADD CERTAIN HEADINGS FOR READ-ABILITY.—Section 2320(a) of such title is further amended—
 - (1) in subparagraph (A) of paragraph (2), by inserting after "(A)" the following: "DEVELOPMENT EXCLUSIVELY WITH FEDERAL FUNDS.—";
 - (2) in subparagraph (B) of such paragraph, by inserting after "(B)" the following: "DEVELOPMENT EXCLUSIVELY AT PRIVATE EXPENSE.—";
 - (3) in subparagraph (C) of such paragraph, by inserting after "(C)" the following: "Exception to subparagraph (B).— ":
 - (4) in subparagraph (D) of such paragraph, by inserting after "(D)" the following: "EXCEPTION TO SUBPARAGRAPH (B).—"; and
 - (5) in subparagraph (E) of such paragraph, by inserting after "(E)" the following: "Development with mixed funding.—".
- (f) GOVERNMENT-INDUSTRY ADVISORY PANEL AMENDMENTS.— Section 813(b) of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92; 129 Stat. 892) is amended—
 - (1) by adding at the end of paragraph (1) the following: "The panel shall develop recommendations for changes to sections 2320 and 2321 of title 10, United States Code, and the regulations implementing such sections.";

(2) in paragraph (3)—

(A) by redesignating subparagraphs (D) and (E) as subparagraphs (E) and (F), respectively; and

(B) by inserting after subparagraph (C) the following

new subparagraph (D):

"(D) Ensuring that the Department of Defense and Department of Defense contractors have the technical data rights necessary to support the modular open system approach requirement set forth in section 2446a of title 10, United States Code, taking into consideration the distinct characteristics of major system platforms, major system interfaces, and major system components developed exclusively with Federal funds, exclusively at private expense, and with a combination of Federal funds and private expense."; and

(3) by amending paragraph (4) to read as follows:

"(4) FINAL REPORT.—Not later than February 1, 2017, the advisory panel shall submit its final report and recommendations to the Secretary of Defense and the congressional defense committees. Not later than 60 days after receiving the report, the Secretary shall submit any comments or recommendations to the congressional defense committees."

Subtitle C—Amendments to General Contracting Authorities, Procedures, and Limitations

SEC. 811. MODIFIED RESTRICTIONS ON UNDEFINITIZED CONTRACTUAL ACTIONS.

Section 2326 of title 10, United States Code, is amended—(1) in subsection (e)—

(A) by redesignating paragraphs (1) and (2) as subparagraphs (A) and (B);

(B) by inserting "(1)" before "The head"; and

(C) by adding at the end the following new paragraph: "(2) If a contractor submits a qualifying proposal to definitize an undefinitized contractual action and the contracting officer for such action definitizes the contract after the end of the 180-day period beginning on the date on which the contractor submitted the qualifying proposal, the head of the agency concerned shall ensure that the profit allowed on the contract accurately reflects the cost risk of the contractor as such risk existed on the date the contractor submitted the qualifying proposal.";

(2) by redesignating subsections (f) and (g) as subsections

(h) and (i), respectively;

(3) by inserting after subsection (e) the following new sub-

"(f) TIME LIMIT.—No undefinitized contractual action may extend beyond 90 days without a written determination by the Secretary of the military department concerned, the head of the Defense Agency concerned, the commander of the combatant command concerned, or the Under Secretary of Defense for Acquisition, Technology, and Logistics (as applicable) that it is in the best interests of the military department, the Defense Agency, the combatant command, or the Department of Defense, respectively, to continue the action.

"(g) FOREIGN MILITARY CONTRACTS.—(1) Except as provided in paragraph (2), a contracting officer of the Department of Defense