

# Union Calendar No. 292

111<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

# H. R. 4842

**[Report No. 111–486, Part I]**

To authorize appropriations for the Directorate of Science and Technology of the Department of Homeland Security for fiscal years 2011 and 2012, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 15, 2010

Ms. CLARKE (for herself, Mr. THOMPSON of Mississippi, and Mr. DANIEL E. LUNGREN of California) introduced the following bill; which was referred to the Committee on Homeland Security

MAY 18, 2010

Reported with an amendment and referred to the Committee on Science and Technology for a period ending not later than June 18, 2010, for consideration of such provisions of the bill and amendment as fall within the jurisdiction of that committee pursuant to clause 1(o), rule X

[Strike out all after the enacting clause and insert the part printed in *italic*]

JUNE 18, 2010

Referral to the Committee on Science and Technology extended for a period ending not later than June 25, 2010

JUNE 25, 2010

Additional sponsors: Mr. KING of New York, Ms. RICHARDSON, Mr. LUJÁN, Mr. AL GREEN of Texas, Mr. PASCRELL, and Ms. KILROY

JUNE 25, 2010

Committee on Science and Technology discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed

[For text of introduced bill, see copy of bill as introduced on March 15, 2010]

# **A BILL**

To authorize appropriations for the Directorate of Science and Technology of the Department of Homeland Security for fiscal years 2011 and 2012, 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 “Homeland Security*  
 5 *Science and Technology Authorization Act of 2010”.*

6 **SEC. 2. TABLE OF CONTENTS.**

7        *The table of contents for this Act is as follows:*

*Sec. 1. Short title.*

*Sec. 2. Table of contents.*

*Sec. 3. Definitions.*

*Sec. 4. References.*

**TITLE I—AUTHORIZATION OF APPROPRIATIONS**

*Sec. 101. Authorization of appropriations.*

**TITLE II—MANAGEMENT AND ADMINISTRATION**

*Sec. 201. Research prioritization and requirements; professional development;  
 milestones and feedback.*

*Sec. 202. Testing, evaluation, and standards.*

*Sec. 203. Peer review.*

*Sec. 204. Office of Public-Private Partnerships.*

**TITLE III—REPORTS**

*Sec. 301. Directorate of Science and Technology strategic plan.*

*Sec. 302. Report on technology requirements.*

*Sec. 303. Report on venture capital organization.*

**TITLE IV—DIRECTORATE OF SCIENCE AND TECHNOLOGY  
 PROGRAMS**

*Sec. 401. Limitations on research.*

*Sec. 402. University-based centers.*

*Sec. 403. Review of university-based centers.*

*Sec. 404. Cybersecurity research and development.*

*Sec. 405. National Research Council study of cybersecurity incentives.*

*Sec. 406. Research on cyber compromise of infrastructure.*

*Sec. 407. Dual-use terrorist risks from synthetic genomics.*

*Sec. 408. Underwater tunnel security demonstration project.*

*Sec. 409. Threats research and development.*

*Sec. 410. Maritime domain awareness and maritime security technology test,  
 evaluation, and transition capabilities.*

*Sec. 411. Rapid biological threat detection and identification.*

*Sec. 412. Educating the public about radiological threats.*

*Sec. 413. Rural resilience initiative.*

*Sec. 414. Sense of Congress regarding the need for interoperability standards for  
 Internet protocol video surveillance technology.*

- Sec. 415. *Homeland Security Science and Technology Fellows Program.*  
 Sec. 416. *Biological threat agent assay equivalency.*  
 Sec. 417. *Study of feasibility and benefit of expanding or establishing program to create a new cybersecurity capacity building track at certain institutions of higher education.*  
 Sec. 418. *Sense of Congress regarding centers of excellence.*  
 Sec. 419. *Assessment, research, testing, and evaluation of technologies to mitigate the threat of small vessel attack.*  
 Sec. 420. *Research and development projects.*  
 Sec. 421. *National Urban Security Technology Laboratory.*

*TITLE V—DOMESTIC NUCLEAR DETECTION OFFICE*

- Sec. 501. *Authorization of appropriations.*  
 Sec. 502. *Domestic Nuclear Detection Office oversight.*  
 Sec. 503. *Strategic plan and funding allocations for global nuclear detection architecture.*  
 Sec. 504. *Radiation portal monitor alternatives.*  
 Sec. 505. *Authorization of Securing the Cities Initiative.*

*TITLE VI—CLARIFYING AMENDMENTS*

- Sec. 601. *Federally funded research and development centers.*  
 Sec. 602. *Elimination of Homeland Security Institute.*  
 Sec. 603. *GAO study of the implementation of the statutory relationship between the Department and the Department of Energy national laboratories.*

*TITLE VII—COMMISSION ON THE PROTECTION OF CRITICAL ELECTRIC AND ELECTRONIC INFRASTRUCTURES*

- Sec. 701. *Commission on the Protection of Critical Electric and Electronic Infrastructures.*

1 **SEC. 3. DEFINITIONS.**

2 *In this Act:*

3 (1) *APPROPRIATE CONGRESSIONAL COM-*  
 4 *MITTEE.—The term “appropriate congressional com-*  
 5 *mittee” means the Committee on Homeland Security*  
 6 *of the House of Representatives and any committee of*  
 7 *the House of Representatives or the Senate having leg-*  
 8 *islative jurisdiction under the rules of the House of*  
 9 *Representatives or Senate, respectively, over the mat-*  
 10 *ter concerned.*

1           (2) *DEPARTMENT.*—*The term “Department”*  
2           *means the Department of Homeland Security.*

3           (3) *DIRECTORATE.*—*The term “Directorate”*  
4           *means the Directorate of Science and Technology of*  
5           *the Department.*

6           (4) *SECRETARY.*—*The term “Secretary” means*  
7           *the Secretary of Homeland Security.*

8           (5) *UNDER SECRETARY.*—*The term “Under Sec-*  
9           *retary” means the Under Secretary for Science and*  
10          *Technology of the Department.*

11 **SEC. 4. REFERENCES.**

12          *Except as otherwise specifically provided, whenever in*  
13 *this Act an amendment or repeal is expressed in terms of*  
14 *an amendment to, or repeal of, a provision, the reference*  
15 *shall be considered to be made to a provision of the Home-*  
16 *land Security Act of 2002 (6 U.S.C. 101 et seq.).*

17           **TITLE I—AUTHORIZATION OF**  
18           **APPROPRIATIONS**

19 **SEC. 101. AUTHORIZATION OF APPROPRIATIONS.**

20          *There are authorized to be appropriated to the Under*  
21 *Secretary \$1,121,664,000 for fiscal year 2011 and*  
22 *\$1,155,313,920 for fiscal year 2012 for the necessary ex-*  
23 *penses of the Directorate.*

1       **TITLE II—MANAGEMENT AND**  
 2                   **ADMINISTRATION**

3   **SEC. 201. RESEARCH PRIORITIZATION AND REQUIRE-**  
 4                   **MENTS; PROFESSIONAL DEVELOPMENT;**  
 5                   **MILESTONES AND FEEDBACK.**

6       (a) *IN GENERAL.*—Subtitle D of title II (6 U.S.C. 161  
 7 *et seq.*) is amended—

8           (1) *in the subtitle heading, by striking “Office*  
 9       **of”;**

10          (2) *in the heading for section 231, by inserting*  
 11       **“OF SCIENCE AND TECHNOLOGY”** after **“OF-**  
 12       **FICE”;** and

13          (3) *by adding at the end the following new sec-*  
 14       *tions:*

15   **“SEC. 238. RESEARCH PRIORITIZATION AND REQUIRE-**  
 16                   **MENTS.**

17       **“(a) REQUIREMENT.**—*The Secretary shall—*

18           **“(1) by not later than 180 days after the date of**  
 19       *enactment of this section, establish requirements for*  
 20       *how basic and applied homeland security research*  
 21       *shall be identified, prioritized, funded, tasked, and*  
 22       *evaluated by the Directorate of Science and Tech-*  
 23       *nology, including the roles and responsibilities of the*  
 24       *Under Secretary for Science and Technology, the*  
 25       *Under Secretary for Policy, the Under Secretary for*

1        *Management, the Director of the Office of Risk Man-*  
2        *agement and Analysis, and the heads of operational*  
3        *components of the Department; and*

4            *“(2) to the greatest extent possible, seek to pub-*  
5        *licize the requirements for the purpose of informing*  
6        *the Federal, State, and local governments, first re-*  
7        *sponders, and the private sector.*

8        *“(b) CONTENTS.—In the requirements, the Secretary*  
9        *shall—*

10            *“(1) identify the Directorate of Science and*  
11        *Technology’s customers within and outside of the De-*  
12        *partment;*

13            *“(2) describe the risk formula and risk assess-*  
14        *ment tools that the Department considers to identify,*  
15        *prioritize, and fund homeland security research*  
16        *projects;*

17            *“(3) describe the considerations to be used by the*  
18        *Directorate to task projects to research entities, in-*  
19        *cluding the national laboratories, federally funded re-*  
20        *search and development centers, and university-based*  
21        *centers;*

22            *“(4) describe the protocols to be used to assess*  
23        *off-the-shelf technology to determine if an identified*  
24        *homeland security capability gap can be addressed*  
25        *through the acquisition process instead of commencing*

1 *research and development of technology to address*  
2 *that capability gap;*

3 *“(5) describe the processes to be used by the Di-*  
4 *rectorate to strengthen first responder participation*  
5 *in identifying and prioritizing homeland security*  
6 *technological gaps by—*

7 *“(A) soliciting feedback from appropriate*  
8 *national associations and advisory groups rep-*  
9 *resenting the first responder community and*  
10 *first responders within the components of the De-*  
11 *partment;*

12 *“(B) establishing and promoting a publicly*  
13 *accessible portal to allow the first responder com-*  
14 *munity to help the Directorate develop homeland*  
15 *security research and development goals; and*

16 *“(C) establishing a mechanism to publicize*  
17 *the Department’s funded and unfunded home-*  
18 *land security technology priorities; and*

19 *“(6) include such other requirements, policies,*  
20 *and practices as the Secretary considers necessary.*

21 *“(c) ACTIVITIES IN SUPPORT OF THE RESEARCH*  
22 *PRIORITIZATION AND REQUIREMENTS.—Not later than one*  
23 *year after the date of the issuance of the requirements, the*  
24 *Secretary shall—*



1           “(1) establish, through the Under Secretary for  
2           *Science and Technology and Under Secretary for*  
3           *Management, a mandatory workforce program for the*  
4           *Directorate’s customers in the Department to better*  
5           *identify and prioritize homeland security capability*  
6           *gaps that may be addressed by a technological solu-*  
7           *tion based on the assessment required under section*  
8           *239(a)(2);*

9           “(2) establish a system to collect feedback from  
10           *customers of the Directorate on the performance of the*  
11           *Directorate, that includes metrics for measuring cus-*  
12           *tomers’ satisfaction and the usefulness of any tech-*  
13           *nology or service provided by the Directorate; and*

14           “(3) any other activities that the Secretary con-  
15           *siders to be necessary to implement the requirements.*

16           “(d) *QUARTERLY UPDATES ON IMPLEMENTATION.—*  
17           *One hundred and twenty days after the date of enactment*  
18           *of this section, and on a quarterly basis thereafter, the In-*  
19           *spector General of the Department shall submit a quarterly*  
20           *update to the appropriate congressional committees on the*  
21           *status of implementation of the research prioritization and*  
22           *requirements and activities in support of such require-*  
23           *ments.*

24           “(e) *RISK ANALYSIS.—In carrying out subsection*  
25           *(b)(2), the Secretary shall—*

1           “(1) submit to the appropriate congressional  
2 committees by not later than one year after the date  
3 of enactment of this subsection and annually there-  
4 after—

5           “(A) a national-level risk assessment, de-  
6 scribing and prioritizing the greatest risks to the  
7 homeland, that includes vulnerability studies,  
8 asset values (including asset values for intangible  
9 assets), estimated rates of occurrence, counter-  
10 measures employed, loss expectancy, cost/benefit  
11 analyses, and other practices generally associated  
12 with producing a comprehensive risk analysis;

13           “(B) an analysis of the Directorate’s ap-  
14 proach to mitigating the homeland security risks  
15 identified under subparagraph (A) through basic  
16 and applied research, development, demonstra-  
17 tion, testing, and evaluation activities;

18           “(C) an analysis, based on statistics and  
19 metrics, of the effectiveness of the Directorate in  
20 reducing the homeland security risks identified  
21 under subparagraph (A) through the deployment  
22 of homeland security technologies researched or  
23 developed by the Directorate;

24           “(D) recommendations for how the Direc-  
25 torate should modify or amend its research and

1           *development activities in order to reduce the*  
2           *risks to the homeland identified under subpara-*  
3           *graph (A);*

4           *“(E) a description of how the analysis re-*  
5           *quired under subparagraph (A) shall be used to*  
6           *inform, guide, and prioritize the Department’s*  
7           *homeland security research and development ac-*  
8           *tivities; and*

9           *“(F) a description of input from other rel-*  
10          *evant Federal, State, or local agencies and rel-*  
11          *evant private sector entities in conducting the*  
12          *risk analysis required by subparagraph (A); and*

13          *“(2) conduct research and development on ways*  
14          *to most effectively communicate information regard-*  
15          *ing the risks identified under paragraph (1) to the*  
16          *media as well as directly to the public, both on an on-*  
17          *going basis and during a terrorist attack or other in-*  
18          *cident.*

19          *“(f) REPORT ON HSARPA ACTIVITIES.—*

20                 *“(1) IN GENERAL.—Consistent with the Federal*  
21                 *Acquisition Regulation and any other relevant Fed-*  
22                 *eral requirements, not later than 60 days after the*  
23                 *date of enactment of this subsection and annually*  
24                 *thereafter, the Secretary shall submit a report to the*  
25                 *appropriate congressional committees containing the*

1       *research, development, testing, evaluation, proto-*  
2       *typing, and deployment activities undertaken by the*  
3       *Homeland Security Advanced Research Projects Agen-*  
4       *cy during the previous fiscal year, including funds*  
5       *expended for such activities in the previous fiscal*  
6       *year.*

7               “(2) *CONTENTS.—For each activity undertaken,*  
8       *the report shall—*

9                       “(A) *describe the corresponding risk anal-*  
10                      *ysis performed by the Department that supports*  
11                      *the decision to undertake that activity; and*

12                      “(B) *describe the efforts made to transition*  
13                      *that activity into a Federal, State, or local ac-*  
14                      *quisition program.*

15               “(3) *ADDITIONAL ACTIVITIES.—The Secretary*  
16       *shall include in each report a description of each pro-*  
17       *posal that was reviewed in the period covered by the*  
18       *report by the Director of the Homeland Security Ad-*  
19       *vanced Research Projects Agency under section*  
20       *313(d)(3), including a statement of whether the pro-*  
21       *posal received a grant, cooperative agreement, or con-*  
22       *tract from the Director.*

23       **“SEC. 239. PROFESSIONAL DEVELOPMENT.**

24               “(a) *REPORTING REQUIREMENT.—Sixty days before*  
25       *establishing the mandatory workforce program as required*

1 *by section 238(c)(1), the Secretary shall report to the appro-*  
2 *priate congressional committees on the following:*

3           “(1) *A description of how homeland security*  
4 *technological requirements are developed by the Direc-*  
5 *torate of Science and Technology’s customers within*  
6 *the Department.*

7           “(2) *An assessment of whether Department em-*  
8 *ployees receive adequate and appropriate job training*  
9 *to allow them to identify, express, and prioritize*  
10 *homeland security capability gaps.*

11           “(3) *A plan for how the Directorate, in coordina-*  
12 *tion with the Domestic Nuclear Detection Office and*  
13 *other Department components, can enhance and im-*  
14 *prove technology requirements development and the*  
15 *technology acquisition process, to accelerate the deliv-*  
16 *ery of effective, suitable technologies that meet per-*  
17 *formance requirements and appropriately address an*  
18 *identified homeland security capability gap.*

19           “(4) *An assessment of whether Congress should*  
20 *authorize, in addition to the program required under*  
21 *section 238(c)(1), a training program for Department*  
22 *employees to be trained in requirements writing and*  
23 *acquisition, that—*

24                   “(A) *is prepared in consultation with the*  
25 *Department of Veterans Affairs Acquisition*

1           *Academy and the Defense Acquisition Univer-*  
2           *sity; and*

3           “(B) if the Secretary determines that such  
4           additional training should be authorized by Con-  
5           gress, includes specification about—

6                   “(i) the type, skill set, and job series of  
7                   Department employees who would benefit  
8                   from such training, including an estimate  
9                   of the number of such employees;

10                   “(ii) a suggested curriculum for the  
11                   training;

12                   “(iii) the type and skill set of edu-  
13                   cators who could most effectively teach those  
14                   skills;

15                   “(iv) the length and duration of the  
16                   training;

17                   “(v) the advantages and disadvantages  
18                   of training employees in a live classroom,  
19                   or virtual classroom, or both;

20                   “(vi) cost estimates for the training;  
21                   and

22                   “(vii) the role of the Directorate in  
23                   supporting the training.

24           “(b) *USE OF RESEARCH AND DEVELOPMENT CEN-*  
25           *TER.—The Secretary is encouraged to use a federally fund-*

1 *ed research and development center to assist the Secretary*  
2 *in carrying out the requirements of this section.*

3 **“SEC. 240. TRACKING SYSTEMS, RESEARCH MILESTONES,**  
4 **AND CUSTOMER FEEDBACK.**

5 *“(a) IN GENERAL.—In establishing a system to collect*  
6 *feedback under section 238(c)(2), the Secretary shall—*

7 *“(1) establish a system to monitor and account*  
8 *for homeland security research milestones;*

9 *“(2) create a formal process for collecting feed-*  
10 *back from customers on the effectiveness of the tech-*  
11 *nology or services delivered by Directorate of Science*  
12 *and Technology, including through randomized sam-*  
13 *pling, focus groups, and other methods as appro-*  
14 *priate; and*

15 *“(3) establish standards and performance meas-*  
16 *ures to be met by the Directorate in order to provide*  
17 *high-quality customer service.*

18 *“(b) SYSTEM.—The system established under sub-*  
19 *section (a)(1) shall identify and account for research mile-*  
20 *stones to monitor the progress of Directorate of Science and*  
21 *Technology research, development, testing, and evaluation*  
22 *activities, and collect information from the Directorate’s*  
23 *customers about their level of satisfaction with the perform-*  
24 *ance of the Directorate, including by—*

1           “(1) allowing the Directorate to provide regular  
2 reports to its customers regarding the status and  
3 progress of research efforts of the Directorate;

4           “(2) collecting and evaluating customer feedback;

5           “(3) allowing the Secretary to evaluate how a  
6 technology or service produced as a result of the Di-  
7 rectorate’s programs has affected homeland security  
8 capability gaps; and

9           “(4) allowing the Secretary to report the number  
10 of products and services developed by the Directorate  
11 that have been transitioned into acquisition pro-  
12 grams.

13           “(c) GUIDANCE.—The Under Secretary for Science  
14 and Technology shall publicize and implement guidance for  
15 homeland security researchers funded by the Directorate on  
16 setting valid initial and subsequent research milestones.

17           “(d) REPORT.—The Under Secretary shall submit a  
18 report to the appropriate congressional committees—

19           “(1) by not later than one year after the date of  
20 enactment of this section identifying what actions  
21 have been taken to carry out the requirements of this  
22 section; and

23           “(2) annually thereafter describing—

24           “(A) research milestones for each large  
25 project with a Federal cost share greater than



1           \$80,000,000 that has been successfully met and  
 2           missed, including for each missed milestone, an  
 3           explanation of why the milestone was missed;  
 4           and

5           “(B) customer feedback collected and the  
 6           success of the Directorate in meeting the cus-  
 7           tomer service performance measures and stand-  
 8           ards, including an evaluation of the effectiveness  
 9           of the technology or services delivered by the Di-  
 10          rectorate.”.

11          (b) *CLERICAL AMENDMENTS.*—The table of contents in  
 12          section 1(b) is amended in the items relating to subtitle D  
 13          of title II—

14               (1) in the item relating to the heading for the  
 15               subtitle, by striking “Office of”;

16               (2) in the item relating to section 231, by strik-  
 17               ing “office” and inserting “Office of Science and  
 18               Technology”; and

19               (3) by adding at the end the following new items:

“Sec. 238. Research prioritization and requirements.

“Sec. 239. Professional development.

“Sec. 240. Tracking systems, research milestones, and customer feedback.”.

20          **SEC. 202. TESTING, EVALUATION, AND STANDARDS.**

21          Section 308 (6 U.S.C. 188) is amended by adding at  
 22          the end of the following new subsection:

23               “(d) *TEST, EVALUATION, AND STANDARDS DIVI-*  
 24               *SION.*—

1           “(1) *ESTABLISHMENT.*—*There is established in*  
2 *the Directorate of Science and Technology a Test,*  
3 *Evaluation, and Standards Division.*

4           “(2) *DIRECTOR.*—*The Test, Evaluation, and*  
5 *Standards Division shall be headed by a Director of*  
6 *Test, Evaluation, and Standards, who shall be ap-*  
7 *pointed by the Secretary and report to the Under Sec-*  
8 *retary for Science and Technology.*

9           “(3) *RESPONSIBILITIES, AUTHORITIES, AND*  
10 *FUNCTIONS.*—*The Director of Test, Evaluation, and*  
11 *Standards—*

12                   “(A) *is the principal adviser to the Sec-*  
13 *retary, the Under Secretary of Management, and*  
14 *the Under Secretary for Science and Technology*  
15 *on all test and evaluation or standards activities*  
16 *in the Department; and*

17                   “(B) *shall—*

18                           “(i) *prescribe test and evaluation poli-*  
19 *cies for the Department, which shall include*  
20 *policies to ensure that operational testing is*  
21 *done at facilities that already have relevant*  
22 *and appropriate safety and material certifi-*  
23 *cations to the extent such facilities are*  
24 *available;*

1           “(ii) oversee and ensure that adequate  
2           test and evaluation activities are planned  
3           and conducted by or on behalf of compo-  
4           nents of the Department in major acquisi-  
5           tion programs of the Department, as des-  
6           ignated by the Secretary, based on risk, ac-  
7           quisition level, novelty, complexity, and size  
8           of the acquisition program, or as otherwise  
9           established in statute;

10           “(iii) review major acquisition pro-  
11           gram test reports and test data to assess the  
12           adequacy of test and evaluation activities  
13           conducted by or on behalf of components of  
14           the Department; and

15           “(iv) review available test and evalua-  
16           tion infrastructure to determine whether the  
17           Department has adequate resources to carry  
18           out its testing and evaluation responsibil-  
19           ities, as established under this title.

20           “(4) DEPUTY DIRECTOR OF OPERATIONAL TEST  
21           AND EVALUATION.—Within the Division there shall be  
22           a Deputy Director of Operational Test and Evalua-  
23           tion, who—

24           “(A) is the principal operational test and  
25           evaluation official for the Department; and

1           “(B) shall—

2                   “(i) monitor and review the oper-  
3                   ational testing and evaluation activities  
4                   conducted by or on behalf of components of  
5                   the Department in major acquisition pro-  
6                   grams of the Department, as designated by  
7                   the Secretary, based on risk, acquisition  
8                   level, novelty, complexity, and size of the ac-  
9                   quisition program, or as otherwise estab-  
10                  lished in statute;

11                   “(ii) provide the Department with  
12                   independent and objective assessments of the  
13                   adequacy of testing and evaluation activi-  
14                   ties conducted in support of major acquisi-  
15                   tions programs; and

16                   “(iii) have prompt and full access to  
17                   test and evaluation documents, data, and  
18                   test results of the Department that the Dep-  
19                   uty Director considers necessary to review  
20                   in order to carry out the duties of the Dep-  
21                   uty Director under this section.

22                   “(5) STANDARDS EXECUTIVE.—Within this Divi-  
23                   sion, there shall be a Standards Executive as de-  
24                   scribed in Office of Management and Budget Circular  
25                   A-119. The Standards Executive shall—

1           “(A) implement the Department’s standards  
2           policy as described in section 102(g); and

3           “(B) support the development and adoption  
4           of voluntary standards in accordance with sec-  
5           tion 12(d) of the National Technology Transfer  
6           and Advancement Act of 1995 (15 U.S.C. 272  
7           note).

8           “(6) *LIMITATION.*—The Division is not required  
9           to carry out operational testing.

10           “(7) *EVALUATION OF DEPARTMENT OF DEFENSE*  
11           *TECHNOLOGIES.*—The Director of Test, Evaluation,  
12           and Standards may evaluate technologies currently in  
13           use or being developed by the Department of Defense  
14           to assess whether they can be leveraged to address  
15           homeland security capability gaps.”.

16 **SEC. 203. PEER REVIEW.**

17           (a) *RESPONSIBILITIES AND AUTHORITIES OF THE*  
18           *UNDER SECRETARY.*—Section 302 (6 U.S.C. 183) is  
19           amended by striking “and” after the semicolon at the end  
20           of paragraph (13), by striking the period at the end of para-  
21           graph (14) and inserting “; and”, and by adding at the  
22           end the following new paragraph:

23           “(15) developing and overseeing the administra-  
24           tion of guidelines for peer review of research and de-  
25           velopment projects, including by—

1           “(A) consulting with experts, including sci-  
2           entists and practitioners, about the research and  
3           development conducted by the Directorate of  
4           Science and Technology; and

5           “(B) performing ongoing independent, ex-  
6           ternal, scientific peer review—

7                   “(i) initially at the division level; or

8                   “(ii) when divisions conduct multiple  
9                   programs focused on significantly different  
10                  subjects, at the program level.”.

11          (b) *REPORT.*—The Secretary shall report to Congress  
12          not later than 60 days after the completion of the first re-  
13          view under section 302(15)(B) of the Homeland Security  
14          Act of 2002, as amended by subsection (a) of this section  
15          on—

16                  (1) the findings of the review; and

17                  (2) any future efforts to ensure that the Depart-  
18          ment’s research projects are peer reviewed, as appro-  
19          priate.

20          **SEC. 204. OFFICE OF PUBLIC-PRIVATE PARTNERSHIPS.**

21          (a) *ESTABLISHMENT.*—Section 313 (6 U.S.C. 193) is  
22          amended to read as follows:

1 **“SEC. 313. OFFICE OF PUBLIC-PRIVATE PARTNERSHIPS.**

2       “(a) *ESTABLISHMENT OF OFFICE.*—*There is estab-*  
3 *lished an Office of Public-Private Partnerships in the Di-*  
4 *rectorate of Science and Technology.*

5       “(b) *DIRECTOR.*—*The Office shall be headed by a Di-*  
6 *rector, who shall be appointed by the Secretary. The Direc-*  
7 *tor shall report to the Under Secretary for Science and*  
8 *Technology.*

9       “(c) *RESPONSIBILITIES.*—*The Director, in coordina-*  
10 *tion with the Private Sector Office of the Department,*  
11 *shall—*

12               “(1) *engage and initiate proactive outreach ef-*  
13 *forts and provide guidance on how to pursue pro-*  
14 *posals to develop or deploy homeland security tech-*  
15 *nologies (including regarding Federal funding, regu-*  
16 *lation, or acquisition), including to persons associated*  
17 *with small businesses (as that term is defined in the*  
18 *Small Business Act (15 U.S.C. 631 et seq.));*

19               “(2) *coordinate with components of the Depart-*  
20 *ment to issue announcements seeking unique and in-*  
21 *novative homeland security technologies to address*  
22 *homeland security capability gaps;*

23               “(3) *promote interaction between homeland secu-*  
24 *rity researchers and private sector companies in order*  
25 *to accelerate transition research or a prototype into*

1 *a commercial product and streamline the handling of*  
2 *intellectual property; and*

3 *“(4) conduct technology research assessment and*  
4 *marketplace analysis for the purpose of identifying,*  
5 *leveraging, and integrating best-of-breed technologies*  
6 *and capabilities from industry, academia, and other*  
7 *Federal Government agencies, and disseminate re-*  
8 *search and findings to Federal, State, and local gov-*  
9 *ernments.*

10 *“(d) RAPID REVIEW DIVISION.—*

11 *“(1) ESTABLISHMENT.—There is established the*  
12 *Rapid Review Division within the Office of Public-*  
13 *Private Partnerships.*

14 *“(2) PURPOSE AND DUTIES.—*

15 *“(A) IN GENERAL.—The Division—*

16 *“(i) is responsible for maintaining a*  
17 *capability to perform business and technical*  
18 *reviews to assist in screening unsolicited*  
19 *homeland security technology proposals sub-*  
20 *mitted to the Secretary; and*

21 *“(ii) shall assess the feasibility, sci-*  
22 *entific and technical merits, and estimated*  
23 *cost of such proposals.*

24 *“(B) SPECIFIC DUTIES.—In carrying out*  
25 *those duties, the Division shall—*



1           “(i) maintain awareness of the techno-  
2           logical requirements of the Directorate’s cus-  
3           tomers;

4           “(ii) establish and publicize accessible,  
5           streamlined procedures allowing a partici-  
6           pant to have their technology assessed by the  
7           Division;

8           “(iii) make knowledgeable assessments  
9           of a participant’s technology after receiving  
10          a business plan, a technology proposal, and  
11          a list of corporate officers, directors, and  
12          employees with technical knowledge of the  
13          proposal, within 60 days after such a sub-  
14          mission;

15          “(iv) review proposals submitted by  
16          components of the Department to the Divi-  
17          sion, subject to subsection (e); and

18          “(v) in reviewing proposals submitted  
19          to the Secretary, give priority to any pro-  
20          posal submitted by a small business concern  
21          as defined under section 3 of the Small  
22          Business Act (15 U.S.C. 632).

23          “(3) COORDINATION.—The Director shall submit  
24          for consideration promising homeland security tech-  
25          nology research, development, testing, and evaluation

1        *proposals, along with any business and technical re-*  
2        *views, to the Director of the Homeland Security Ad-*  
3        *vanced Research Projects Agency and appropriate De-*  
4        *partment components for consideration for support.*

5        *“(e) LIMITATION ON CONSIDERATION OR EVALUATION*  
6        *OF PROPOSALS.—The Office may not consider or evaluate*  
7        *homeland security technology proposals submitted in re-*  
8        *sponse to a solicitation for offers for a pending procurement*  
9        *or for a specific agency requirement.*

10        *“(f) SATELLITE OFFICES.—The Under Secretary, act-*  
11        *ing through the Director, may establish up to 3 satellite*  
12        *offices across the country to enhance the Department’s out-*  
13        *reach efforts. The Secretary shall notify the appropriate*  
14        *congressional committees in writing within 30 days after*  
15        *establishing any satellite office.*

16        *“(g) PERSONNEL.—The Secretary shall establish rules*  
17        *to prevent the Director or any other employee of the Office*  
18        *from acting on matters where a conflict of interest may*  
19        *exist.”.*

20        *(b) CLERICAL AMENDMENT.—The table of contents in*  
21        *section 1(b) is amended by striking the item relating to such*  
22        *section and inserting the following:*

*“Sec. 313. Office of Public-Private Partnerships.”.*

23        *(c) AUTHORIZATION OF APPROPRIATIONS.—Of the*  
24        *amount authorized by section 101, there is authorized to*

1 *be appropriated \$30,000,000 for the Office of Public-Private*  
2 *Partnerships for each of fiscal years 2011 and 2012.*

### 3 **TITLE III—REPORTS**

4 **SEC. 301. DIRECTORATE OF SCIENCE AND TECHNOLOGY**  
5 **STRATEGIC PLAN.**

6 *(a) IN GENERAL.—Title III (6 U.S.C. 181 et seq.) is*  
7 *amended by adding at the end the following new section:*

8 **“SEC. 318. STRATEGIC PLAN.**

9 *“(a) REQUIREMENT FOR STRATEGIC PLAN.—Not later*  
10 *than 1 year after the date of enactment of this section and*  
11 *every other year thereafter, the Under Secretary for Science*  
12 *and Technology shall prepare a strategic plan for the activi-*  
13 *ties of the Directorate.*

14 *“(b) CONTENTS.—The strategic plan required by sub-*  
15 *section (a) shall be prepared in accordance with applicable*  
16 *Federal requirements, and shall include the following mat-*  
17 *ters:*

18 *“(1) The long-term strategic goals of the Direc-*  
19 *torate.*

20 *“(2) Identification of the research programs of*  
21 *the Directorate that support achievement of those*  
22 *strategic goals.*

23 *“(3) The connection of the activities and pro-*  
24 *grams of the Directorate to requirements or homeland*  
25 *security capability gaps identified by customers with-*

1       *in the Department and outside of the Department, in-*  
 2       *cluding the first responder community.*

3               “(4) *The role of the Department’s risk analysis*  
 4       *in the activities and programs of the Directorate.*

5               “(5) *A technology transition strategy for the pro-*  
 6       *grams of the Directorate.*

7               “(6) *A description of the policies of the Direc-*  
 8       *torate on the management, organization, and per-*  
 9       *sonnel of the Directorate.*

10       “(c) *SUBMISSION OF PLAN TO CONGRESS.—The Sec-*  
 11       *retary shall submit to Congress any update to the strategic*  
 12       *plan most recently prepared under subsection (a) at the*  
 13       *same time that the President submits to Congress the budget*  
 14       *for each even-numbered fiscal year.”.*

15       “(b) *CLERICAL AMENDMENT.—The table of contents in*  
 16       *section 1(b) is amended by adding at the end of the items*  
 17       *relating to title III the following new item:*

      “*Sec. 318. Strategic plan.*”.

18       **SEC. 302. REPORT ON TECHNOLOGY REQUIREMENTS.**

19       *Section 302 (6 U.S.C. 182) is amended by inserting*  
 20       “(a) *IN GENERAL.—*” *before the first sentence, and by add-*  
 21       *ing at the end the following new subsection:*

22       “(b) *REPORT ON TECHNOLOGY REQUIREMENTS.—*

23               “(1) *IN GENERAL.—Within 90 days after the*  
 24       *date of enactment of this subsection, and biannually*  
 25       *thereafter, the Under Secretary shall, for each project*

1       *having a Federal cost share greater than \$80,000,000*  
2       *that is conducted or funded by the Directorate of*  
3       *Science and Technology, provide to the appropriate*  
4       *congressional committees a list of detailed operational*  
5       *and technical requirements that are associated with*  
6       *the project.*

7               “(2) *LARGE PROJECTS.*—*Within 90 days after*  
8       *the date of enactment of this subsection, and bian-*  
9       *nually thereafter, the Secretary shall, for each project*  
10       *conducted or funded by a component of the Depart-*  
11       *ment, other than the Directorate of Science and Tech-*  
12       *nology, having a life-cycle cost greater than*  
13       *\$1,000,000,000, provide to the appropriate congres-*  
14       *sional committees detailed operational and technical*  
15       *requirements that are associated with the project.”.*

16       **SEC. 303. REPORT ON VENTURE CAPITAL ORGANIZATION.**

17               “(a) *IN GENERAL.*—*Not later than 1 year after the date*  
18       *of enactment of this Act, the Secretary shall submit a report*  
19       *to the appropriate congressional committees—*

20                       (1) *assessing the current role of the venture cap-*  
21       *ital community in funding advanced homeland secu-*  
22       *urity technologies, including technologies proposed by*  
23       *small business concerns as defined under section 3 of*  
24       *the Small Business Act (15 U.S.C. 632); and*

1           (2) *providing recommendations about creating a*  
2 *nonprofit organization for the purposes of delivering*  
3 *advanced homeland security technologies to the home-*  
4 *land security community to further its missions.*

5           (b) *CONTENTS.—The report shall include the following:*

6           (1) *An assessment of the current awareness and*  
7 *insight that the Department has regarding advanced*  
8 *private sector homeland security innovation, and the*  
9 *Department’s ability to quickly transition innovative*  
10 *products into acquisitions.*

11           (2) *A description of how the Department cur-*  
12 *rently finds and works with emerging companies,*  
13 *particularly firms that have never done business with*  
14 *the Federal Government, small business concerns,*  
15 *small business concerns that are owned and operated*  
16 *by women, small business concerns that are owned*  
17 *and operated by veterans, and minority-owned and*  
18 *operated small business concerns.*

19           (3) *An assessment and analysis of the current*  
20 *role that venture capitalists play in the development*  
21 *of homeland security technologies, including an as-*  
22 *essment of how the venture capital community could*  
23 *be leveraged to accelerate technology, foster develop-*  
24 *ment, and introduce new technologies needed by the*  
25 *homeland security community.*

1           (4) *An assessment of whether the Department*  
2           *could help nascent commercial technologies mature*  
3           *into commercial-off-the-shelf products the homeland*  
4           *security community could acquire.*

5           (5) *An analysis of whether the Central Intel-*  
6           *ligence Agency's In-Q-Tel organization or the Depart-*  
7           *ment of Defense's OnPoint Technologies organization*  
8           *could serve as a model for the development of home-*  
9           *land security technology at the Department.*

10          (6) *Recommendations of the Secretary regarding*  
11          *how Congress could authorize the establishment of a*  
12          *private, independent, not-for-profit organization to*  
13          *bridge the gap between the technology needs of the*  
14          *homeland security community and new advances in*  
15          *commercial technology, including specifics on poten-*  
16          *tial funding levels, activities for the organization, in-*  
17          *cluding the provision of technical assistance, and*  
18          *whether to establish set-asides for small businesses*  
19          *that are minority-owned and operated or located in*  
20          *socially and economically disadvantaged areas.*

21          (c) *USE OF RESEARCH AND DEVELOPMENT CEN-*  
22          *TER.—The Secretary is encouraged to use a federally fund-*  
23          *ed research and development center to produce the report*  
24          *under this section.*

1       (d) *AUTHORIZATION OF APPROPRIATIONS.*—Of the  
2 amount authorized by section 101, there is authorized  
3 \$500,000 for the report.

4       **TITLE IV—DIRECTORATE OF**  
5       **SCIENCE AND TECHNOLOGY**  
6       **PROGRAMS**

7       **SEC. 401. LIMITATIONS ON RESEARCH.**

8       Section 302(a)(4), as designated by section 302, is fur-  
9 ther amended by inserting after “extramural programs,”  
10 the following: “that, to the greatest extent possible, addresses  
11 a prioritized risk to the homeland as identified by a risk  
12 analysis under section 226(e) of this Act”.

13       **SEC. 402. UNIVERSITY-BASED CENTERS.**

14       (a) *AUTHORIZATION OF APPROPRIATIONS.*—Of the  
15 amount authorized by section 101, there is authorized to  
16 be appropriated \$40,000,000 for fiscal year 2011 and  
17 \$41,200,000 for fiscal year 2012 to the Secretary to carry  
18 out the university-based centers program of the Department.

19       (b) *CRITERIA FOR DESIGNATION.*—Section  
20 308(b)(2)(B)(iii) (6 U.S.C. 188(b)(2)(B)(iii)) is amended  
21 by inserting before the period at the end the following: “,  
22 including medical readiness training and research, and  
23 community resiliency for public health and healthcare crit-  
24 ical infrastructure”.



1           (c) *EXPLOSIVE COUNTERMEASURES OR DETECTION.*—  
2 *Section 308(b)(2)(B)(iv) (6 U.S.C. 188(b)(2)(B)(iv)) is*  
3 *amended by striking “and nuclear” and inserting “nuclear,*  
4 *and explosive”.*

5 **SEC. 403. REVIEW OF UNIVERSITY-BASED CENTERS.**

6           (a) *GAO STUDY OF UNIVERSITY-BASED CENTERS.*—  
7 *Not later than 120 days after the date of enactment of this*  
8 *Act, the Comptroller General of the United States shall ini-*  
9 *tiate a study to assess the university-based centers for home-*  
10 *land security program authorized by section 308(b)(2) of*  
11 *the Homeland Security Act of 2002 (6 U.S.C. 188(b)(2)),*  
12 *and provide recommendations to the appropriate congres-*  
13 *sional committees for appropriate improvements.*

14           (b) *SUBJECT MATTERS.*—*The study under subsection*  
15 *(a) shall include the following:*

16                   (1) *A review of key areas of study needed to sup-*  
17 *port the homeland security mission, and criteria that*  
18 *should be utilized to determine those key areas for*  
19 *which the Department should maintain, establish, or*  
20 *eliminate university-based centers.*

21                   (2) *A review of the method by which university-*  
22 *based centers, federally funded research and develop-*  
23 *ment centers, and Department of Energy national*  
24 *laboratories receive tasking from the Department, in-*

1 *cluding a review of how university-based research is*  
2 *identified, prioritized, and funded.*

3 *(3) A review of selection criteria for designating*  
4 *university-based centers and a weighting of such cri-*  
5 *teria.*

6 *(4) An examination of the optimal organization*  
7 *and role of the university-based centers in supporting*  
8 *the mission of the Directorate and the Department*  
9 *components.*

10 *(5) An identification of the most appropriate re-*  
11 *view criteria and metrics to measure demonstrable*  
12 *progress achieved by university-based centers in ful-*  
13 *filling Department taskings, and mechanisms for de-*  
14 *livering and disseminating the research results of des-*  
15 *ignated university-based centers within the Depart-*  
16 *ment and to other Federal, State, and local agencies.*

17 *(6) An examination of the means by which aca-*  
18 *demie institutions that are not designated or associ-*  
19 *ated with the designated university-based centers can*  
20 *optimally contribute to the research mission of the*  
21 *Directorate.*

22 *(7) An assessment of the interrelationship be-*  
23 *tween the different university-based centers.*

24 *(8) A review of any other essential elements of*  
25 *the programs determined in the conduct of the study.*

1           (c) *MORATORIUM ON NEW UNIVERSITY-BASED CEN-*  
2 *TERS.—The Secretary may not designate any new univer-*  
3 *sity-based centers to research new areas in homeland secu-*  
4 *rity prior to the completion of the Comptroller General’s*  
5 *review.*

6 **SEC. 404. CYBERSECURITY RESEARCH AND DEVELOPMENT.**

7           (a) *IN GENERAL.—The Under Secretary shall support*  
8 *research, development, testing, evaluation, and transition of*  
9 *cybersecurity technology, including fundamental, long-term*  
10 *research to improve the ability of the United States to pre-*  
11 *vent, protect against, detect, respond to, and recover from*  
12 *acts of terrorism and cyber attacks, with an emphasis on*  
13 *research and development relevant to large-scale, high-im-*  
14 *pact attacks.*

15           (b) *ACTIVITIES.—The research and development sup-*  
16 *ported under subsection (a) shall include work to—*

17                   (1) *advance the development and accelerate the*  
18 *deployment of more secure versions of fundamental*  
19 *Internet protocols and architectures, including for the*  
20 *domain name system and routing protocols;*

21                   (2) *improve and create technologies for detecting*  
22 *attacks or intrusions, including real-time monitoring*  
23 *and real-time analytic technologies;*

24                   (3) *improve and create mitigation and recovery*  
25 *methodologies, including techniques and policies for*

1 *real-time containment of attacks, and development of*  
2 *resilient networks and systems that degrade grace-*  
3 *fully;*

4 (4) *develop and support infrastructure and tools*  
5 *to support cybersecurity research and development ef-*  
6 *forts, including modeling, testbeds, and data sets for*  
7 *assessment of new cybersecurity technologies;*

8 (5) *assist the development and support of tech-*  
9 *nologies to reduce vulnerabilities in process control*  
10 *systems;*

11 (6) *develop and support cyber forensics and at-*  
12 *tack attribution; and*

13 (7) *test, evaluate, and facilitate the transfer of*  
14 *technologies associated with the engineering of less*  
15 *vulnerable software and securing the information*  
16 *technology software development lifecycle.*

17 (c) *COORDINATION.*—*In carrying out this section, the*  
18 *Under Secretary shall coordinate activities with—*

19 (1) *the Under Secretary for National Protection*  
20 *and Programs; and*

21 (2) *the heads of other relevant Federal depart-*  
22 *ments and agencies, including the National Science*  
23 *Foundation, the Defense Advanced Research Projects*  
24 *Agency, the Information Assurance Directorate of the*  
25 *National Security Agency, the National Institute of*

1       *Standards and Technology, the Department of Com-*  
2       *merce, and other appropriate working groups estab-*  
3       *lished by the President to identify unmet needs and*  
4       *cooperatively support activities, as appropriate.*

5       *(d) AUTHORIZATION OF CYBERSECURITY PREPARED-*  
6       *NESS CONSORTIUM AND TRAINING CENTER.—*

7               *(1) CYBERSECURITY PREPAREDNESS CONSOR-*  
8       *TIUM.—Subtitle C of title II of the Homeland Secu-*  
9       *rity Act of 2002 (6 U.S.C. 121 et seq.) is amended by*  
10       *adding at the end the following new section:*

11       **“SEC. 226. CYBERSECURITY PREPAREDNESS CONSORTIUM.**

12               *“(a) IN GENERAL.—To assist the Secretary in car-*  
13       *rying out the requirements of section 404(a) of the Home-*  
14       *land Security Science and Technology Authorization Act of*  
15       *2010, the Secretary may establish a consortium to be known*  
16       *as the ‘Cybersecurity Preparedness Consortium’.*

17               *“(b) FUNCTIONS.—The Consortium shall—*

18                       *“(1) provide training to State and local first re-*  
19       *sponders and officials specifically for preparing and*  
20       *responding to cybersecurity attacks;*

21                       *“(2) develop and update a curriculum and*  
22       *training model for State and local first responders*  
23       *and officials;*

1           “(3) *provide technical assistance services to build*  
2           *and sustain capabilities in support of cybersecurity*  
3           *preparedness and response;*

4           “(4) *conduct cybersecurity training and simula-*  
5           *tion exercises to defend from and respond to cyber at-*  
6           *tacks; and*

7           “(5) *coordinate all cybersecurity preparedness*  
8           *training activities conducted by the Department.*

9           “(c) *MEMBERS.—The Consortium shall consist of aca-*  
10          *demie, nonprofit, and government partners that—*

11           “(1) *have demonstrated expertise in developing*  
12           *and delivering cybersecurity training in support of*  
13           *homeland security;*

14           “(2) *have demonstrated ability to utilize existing*  
15           *courses and expertise developed by the Department;*

16           “(3) *have demonstrated ability to coordinate*  
17           *with the National Domestic Preparedness Consortium*  
18           *and other training programs within the Department;*  
19           *and*

20           “(4) *include at least 3 academic institutions that*  
21           *are any combination of historically Black colleges and*  
22           *universities, Hispanic-serving institutions, or Tribal*  
23           *Colleges and Universities, that fulfill the criteria of*  
24           *paragraphs (1), (2) and (3) of this subsection.*

25           “(d) *DEFINITIONS.—In this section:*

1           “(1) *HISTORICALLY BLACK COLLEGE OR UNIVER-*  
2           *SITY.—The term ‘historically Black college or univer-*  
3           *sity’ has the meaning given the term ‘part B institu-*  
4           *tion’ in section 322(2) of the Higher Education Act*  
5           *of 1965 (20 U.S.C. 1061(2)).*

6           “(2) *HISPANIC-SERVING INSTITUTION.—The term*  
7           *‘Hispanic-serving institution’ has the meaning given*  
8           *that term in section 502 of the Higher Education Act*  
9           *of 1965 (20 U.S.C. 1101(a)).*

10           “(3) *TRIBAL COLLEGE OR UNIVERSITY.—The*  
11           *term ‘Tribal College or University’ has the meaning*  
12           *given that term in section 316(b) of the Higher Edu-*  
13           *cation Act of 1965 (20 U.S.C. 1059c(b)).”.*

14           (2) *CLERICAL AMENDMENT.—Section 1(b) of*  
15           *such Act is further amended by adding at the end of*  
16           *the items relating to such subtitle the following new*  
17           *item:*

          “*Sec. 226. Cybersecurity Preparedness Consortium.*”.

18           (3) *CYBERSECURITY TRAINING CENTER.—Sub-*  
19           *title C of title II of the Homeland Security Act of*  
20           *2002 (6 U.S.C. 121 et seq.) is further amended by*  
21           *adding at the end the following new section:*

22           **“SEC. 227. CYBERSECURITY TRAINING CENTER.**

23           *“The Secretary may establish where appropriate a Cy-*  
24           *bersecurity Training Center to provide training courses and*

1 *other resources for State and local first responders and offi-*  
2 *cial to improve preparedness and response capabilities.”.*

3 (4) *CLERICAL AMENDMENT.—Section 1(b) of*  
4 *such Act is further amended by adding at the end of*  
5 *the items relating to such subtitle the following new*  
6 *item:*

*“Sec. 227. Cybersecurity Training Center.”.*

7 (e) *AUTHORIZATION OF APPROPRIATIONS.—Of the*  
8 *amount authorized by section 101, there is authorized to*  
9 *be appropriated \$75,000,000 to the Department for each of*  
10 *fiscal years 2011 and 2012 for the cybersecurity research*  
11 *and development activities of the Directorate to prevent, de-*  
12 *tect, and respond to acts of terrorism and other large-scale*  
13 *disruptions to information infrastructure.*

14 **SEC. 405. NATIONAL RESEARCH COUNCIL STUDY OF CYBER-**  
15 **SECURITY INCENTIVES.**

16 (a) *STUDY.—Not later than 90 days after the date of*  
17 *enactment of this Act, the Under Secretary and the Under*  
18 *Secretary for National Protection and Programs of the De-*  
19 *partment shall seek to enter into an agreement with the Na-*  
20 *tional Research Council of the National Academy of*  
21 *Sciences to conduct a study to assess methods that might*  
22 *be used to promote market mechanisms that further cyberse-*  
23 *curity and make recommendations for appropriate im-*  
24 *provements thereto.*



1       (b) *SUBJECT MATTERS.*—*The study required under*  
2 *subsection (a) shall include the following:*

3           (1) *Liability that subjects software and system*  
4 *vendors and system operators to potential damages*  
5 *for system breaches.*

6           (2) *Mandated reporting of security breaches that*  
7 *could threaten critical functions, including provision*  
8 *of electricity and resiliency of the financial sector.*

9           (3) *Regulation that under threat of civil penalty,*  
10 *imposes best practices on system operators of critical*  
11 *infrastructure.*

12           (4) *Certification from standards bodies about*  
13 *conformance to relevant cybersecurity standards that*  
14 *can be used as a marketplace differentiation.*

15           (5) *Accounting practices that require companies*  
16 *to report their cybersecurity practices and postures*  
17 *and the results of independently conducted red team*  
18 *simulated attacks or exercises.*

19           (6) *Cybersecurity risk insurance, including anal-*  
20 *ysis of the current marketplace and recommendations*  
21 *to promote cybersecurity insurance.*

22       (c) *SUBMISSION TO CONGRESS.*—*Not later than two*  
23 *years after the date of enactment of this Act, the Secretary*  
24 *shall submit to the appropriate congressional committees*  
25 *the results of the study required under subsection (a), to-*

1 *gether with any recommendations of the Secretary related*  
2 *thereto.*

3 (d) *AUTHORIZATION OF APPROPRIATIONS.*—*Of the*  
4 *amount authorized by section 101, there is authorized to*  
5 *be appropriated \$500,000 to the Department for fiscal year*  
6 *2011 to carry out this section.*

7 **SEC. 406. RESEARCH ON CYBER COMPROMISE OF INFRA-**  
8 **STRUCTURE.**

9 (a) *IN GENERAL.*—*Pursuant to section 201 of the*  
10 *Homeland Security Act of 2002 (6 U.S.C. 121) and in fur-*  
11 *therance of domestic preparedness for and collective re-*  
12 *sponse to a cyber attack by a terrorist or other person, the*  
13 *Secretary, working with the heads of other national security*  
14 *and intelligence agencies, shall conduct research and deter-*  
15 *mine if the security of federally owned programmable elec-*  
16 *tronic devices and communication networks, including*  
17 *hardware, software, and data, essential to the reliable oper-*  
18 *ation of critical electric infrastructure has been com-*  
19 *promised.*

20 (b) *SCOPE OF RESEARCH.*—*The scope of the research*  
21 *required under subsection (a) shall include the following:*

22 (1) *The extent of any compromise.*

23 (2) *An identification of any attackers, including*  
24 *any affiliations with terrorists, terrorist organiza-*  
25 *tions, state entities, and non-state entities.*

1           (3) *The method of penetration.*

2           (4) *Ramifications of any such compromise on fu-*  
3 *ture operations of critical electric infrastructure.*

4           (5) *Secondary ramifications of any such com-*  
5 *promise on other critical infrastructure sectors and*  
6 *the functioning of civil society.*

7           (6) *Ramifications of any such compromise on*  
8 *national security, including war fighting capability.*

9           (7) *Recommended mitigation activities.*

10       (c) *REPORT.—Not later than 30 days after the date*  
11 *a determination has been made under subsection (a), the*  
12 *Secretary shall submit to the appropriate congressional*  
13 *committees a report on the findings of such determination.*  
14 *The report may contain a classified annex if the Secretary*  
15 *determines it to be appropriate.*

16 **SEC. 407. DUAL-USE TERRORIST RISKS FROM SYNTHETIC**  
17 **GENOMICS.**

18       (a) *SENSE OF CONGRESS.—It is the sense of Congress*  
19 *that the field of synthetic genomics has the potential to fa-*  
20 *cilitate enormous gains in fundamental discovery and bio-*  
21 *technological applications, but it also has inherent dual-*  
22 *use homeland security risks that must be managed.*

23       (b) *REQUIREMENT.—The Under Secretary shall exam-*  
24 *ine and report to the appropriate congressional committees*  
25 *by not later than one year after the date of enactment of*

1 *this Act on the homeland security implications of the dual-*  
2 *use nature of synthetic genomics and, if the Under Sec-*  
3 *retary determines that such research is appropriate, may*  
4 *conduct research in that area, including—*

5           (1) *determining the current capability of syn-*  
6 *thetic nucleic acid providers to effectively differentiate*  
7 *a legitimate customer from a potential terrorist or*  
8 *other malicious actor;*

9           (2) *determining the current capability of syn-*  
10 *thetic nucleic acid providers to effectively screen or-*  
11 *ders for sequences of homeland security concern; and*

12           (3) *making recommendations regarding screen-*  
13 *ing software, protocols, and other remaining capa-*  
14 *bility gaps uncovered by the study.*

15 **SEC. 408. UNDERWATER TUNNEL SECURITY DEMONSTRA-**  
16 **TION PROJECT.**

17           (a) *IN GENERAL.*—*The Under Secretary, in consulta-*  
18 *tion with the Assistant Secretary of the Transportation Se-*  
19 *curity Administration, shall conduct a demonstration*  
20 *project to test and assess the feasibility and effectiveness of*  
21 *certain technologies to enhance the security of underwater*  
22 *public transportation tunnels against terrorist attacks in-*  
23 *volving the use of improvised explosive devices.*

24           (b) *INFLATABLE PLUGS.*—*At least one of the tech-*  
25 *nologies tested under subsection (a) shall be inflatable plugs*

1 *that may be rapidly deployed to prevent flooding of an un-*  
2 *derwater public transportation tunnel.*

3 *(c) REPORT.—Not later than 180 days after the com-*  
4 *pletion of the demonstration project under subsection (a),*  
5 *the Under Secretary shall submit to the appropriate con-*  
6 *gressional committees a report on the results of the dem-*  
7 *onstration project.*

8 **SEC. 409. THREATS RESEARCH AND DEVELOPMENT.**

9 *(a) IN GENERAL.—The Under Secretary, in carrying*  
10 *out responsibilities under section 302 of the Homeland Se-*  
11 *curity Act of 2002 (6 U.S.C. 182), may support research,*  
12 *development, testing, evaluation, and transition of tech-*  
13 *nology that increases the Nation’s preparedness against*  
14 *chemical and biological threats and strengthens the Nation’s*  
15 *preparedness and collective response against those threats*  
16 *through improved threat awareness and advanced surveil-*  
17 *lance, detection, and protective countermeasures, and to en-*  
18 *hance the development of border security technology.*

19 *(b) BIOLOGICAL SECURITY.—To carry out subsection*  
20 *(a), the Under Secretary may conduct research to develop*  
21 *understanding, technologies, and systems needed to protect*  
22 *against biological attacks on the Nation’s population or in-*  
23 *frastructure, including—*

24 *(1) providing advanced planning tools, concepts*  
25 *of operations (including alarm resolution protocols),*

1        *and training exercises for responding to and recov-*  
2        *ering from biological attacks;*

3            *(2) developing biological assays and improved*  
4        *detection technology that will operate with faster de-*  
5        *tection times, lower costs, and the potential for in-*  
6        *creased geographical coverage to the Nation when*  
7        *compared to existing homeland security technologies;*

8            *(3) characterizing threats posed by biological*  
9        *weapons, anticipating future threats, conducting com-*  
10       *prehensive threat and risk assessments to guide*  
11       *prioritization of the Nation's biodefense investments,*  
12       *and developing population threat assessments that in-*  
13       *form the issuance of material threat determinations;*

14           *(4) conducting bioforensics research in support of*  
15       *criminal investigations to aid attribution, apprehen-*  
16       *sion, and prosecution of a terrorist or other pepe-*  
17       *trator of a biological attack, and providing tools and*  
18       *facilities that Federal law enforcement investigators*  
19       *need to analyze biological threat evidence recovered,*  
20       *including operation of the National Bioforensic Anal-*  
21       *ysis Center; and*

22           *(5) conducting appropriate research and studies*  
23       *that will increase our understanding of and uncer-*  
24       *tainties associated with risk and threats posed by bio-*  
25       *logical agents through the Biological Threat Charac-*

1        *terization Center and other means as determined by*  
2        *the Secretary.*

3        (c) *AGRICULTURAL SECURITY.*—*The Under Secretary*  
4        *may conduct research and development to enhance the pro-*  
5        *tection of the Nation’s agriculture and food system against*  
6        *terrorist attacks, and other emergency events through en-*  
7        *hancement of current agricultural countermeasures, devel-*  
8        *opment of new agricultural countermeasures, and provision*  
9        *of safe, secure, state-of-the-art biocontainment laboratories*  
10       *for researching foreign animal and zoonotic diseases, in-*  
11       *cluding—*

12                (1) *developing technologies to defend the Nation*  
13        *against the natural and intentional introduction of*  
14        *selected foreign animal diseases, developing next-gen-*  
15        *eration vaccines and diagnostics in coordination with*  
16        *the Department of Agriculture, and modeling the*  
17        *spread of foreign animal diseases and their economic*  
18        *impact to evaluate strategies for controlling outbreaks;*  
19        *and*

20                (2) *leading the Department effort to enhance*  
21        *interagency coordination of research and development*  
22        *of agricultural disease countermeasures.*

23        (d) *CHEMICAL SECURITY.*—*The Under Secretary may*  
24        *develop technology to reduce the Nation’s vulnerability to*

1 *chemical warfare agents and commonly used toxic indus-*  
2 *trial chemicals, including—*

3           (1) *developing a robust and enduring analytical*  
4 *capability in support of chemical countermeasures de-*  
5 *velopment, including developing and validating foren-*  
6 *sic methodologies and analytical tools, conducting*  
7 *risk and vulnerability assessments based on chemical*  
8 *threat properties, and maintaining infrastructure in-*  
9 *cluding the Chemical Security Analysis Center;*

10           (2) *developing technology to detect a chemical*  
11 *threat release; and*

12           (3) *developing technologies and guidance docu-*  
13 *ments to foster a coordinated approach to returning*  
14 *a chemically contaminated area to a normal condi-*  
15 *tion, and to foster analysis of contaminated areas*  
16 *both before and after the restoration process.*

17 *(e) RISK ASSESSMENTS.—*

18           (1) *IN GENERAL.—The Under Secretary shall*  
19 *produce risk assessments for biological and chemical*  
20 *threats, and shall coordinate with the Director of the*  
21 *Domestic Nuclear Detection Office of the Department,*  
22 *the Assistant Secretary of the Office of Health Affairs*  
23 *of the Department, and the Assistant Secretary of In-*  
24 *frastructure Protection of the Department on an inte-*



1 *grated risk assessment, including regarding chemical,*  
2 *biological, radiological, nuclear, and explosive threats.*

3 (2) *USAGE.—The assessments required under*  
4 *paragraph (1) shall be used to inform and guide the*  
5 *threat assessments and determinations by the Sec-*  
6 *retary of Homeland Security regarding agents and*  
7 *toxins pursuant to section 302(9) of the Homeland*  
8 *Security Act of 2002 (6 U.S.C. 182(9)), and to guide*  
9 *prioritization of other homeland defense activities, as*  
10 *appropriate.*

11 (3) *TASK FORCE.—The Under Secretary for*  
12 *Science and Technology shall convene an interagency*  
13 *task force of relevant subject matter experts to assess*  
14 *the proposed methodology to be used for each assess-*  
15 *ment required under paragraph (1), and to provide*  
16 *recommendations to the Under Secretary as to the*  
17 *adequacy of such methodology.*

18 (f) *BORDER SECURITY.—The Under Secretary may*  
19 *develop technology, in coordination with the Commissioner*  
20 *of Customs and Border Protection, to gain effective control*  
21 *of the international land borders of the United States with-*  
22 *in 5 years after the date of enactment of this Act. In car-*  
23 *rying out such development activities, the Under Secretary*  
24 *shall ensure coordination and integration between new tech-*

1 *nologies developed and those already utilized by U.S. Cus-*  
2 *toms and Border Protection.*

3 **SEC. 410. MARITIME DOMAIN AWARENESS AND MARITIME**  
4 **SECURITY TECHNOLOGY TEST, EVALUATION,**  
5 **AND TRANSITION CAPABILITIES.**

6 (a) *GLOBAL MARITIME DOMAIN AWARENESS AND*  
7 *MARITIME SECURITY TECHNOLOGY TEST, EVALUATION,*  
8 *AND TRANSITION CAPABILITIES.—*

9 (1) *ESTABLISHMENT.—The Secretary shall estab-*  
10 *lish capabilities for conducting global maritime do-*  
11 *main awareness and maritime security technology*  
12 *test, evaluation, and transition, as provided in this*  
13 *subsection.*

14 (2) *PURPOSE.—The purpose of such capabilities*  
15 *shall be to—*

16 (A) *direct technology test, evaluation, and*  
17 *transition activities in furtherance of border and*  
18 *maritime security; and*

19 (B) *evaluate such technology in diverse en-*  
20 *vironments including coastal, seaport, and off-*  
21 *shore locations.*

22 (b) *COORDINATION.—The Secretary, acting through*  
23 *the Under Secretary, shall ensure that—*

24 (1) *technology test, evaluation, and transition ef-*  
25 *forts funded by the Department in furtherance of bor-*

1 *der and maritime security avoid duplication of ef-*  
2 *forts, reduce unnecessary redundancies, streamline*  
3 *processes, increase efficiencies, and otherwise com-*  
4 *plement existing Department and other efforts in bor-*  
5 *der and maritime security; and*

6 *(2) the results of such efforts are shared with the*  
7 *appropriate congressional committees and others as*  
8 *determined appropriate by the Secretary.*

9 **SEC. 411. RAPID BIOLOGICAL THREAT DETECTION AND**  
10 **IDENTIFICATION.**

11 *(a) IN GENERAL.—Notwithstanding section 302(4) of*  
12 *the Homeland Security Act of 2002 (6 U.S.C. 182(4)), the*  
13 *Secretary shall require the Under Secretary, in consultation*  
14 *with other relevant operational components of the Depart-*  
15 *ment, to assess whether the development of screening capa-*  
16 *bilities for pandemic influenza and other infectious diseases*  
17 *should be undertaken by the Directorate to support entry*  
18 *and exit screening at ports of entry and for other purposes.*

19 *(b) DEVELOPMENT OF METHODS.—If the Under Sec-*  
20 *retary determines that the development of such screening*  
21 *capabilities should be undertaken, the Secretary shall, to the*  
22 *extent possible, initiate development of safe and effective*  
23 *methods to rapidly screen incoming travelers at ports of*  
24 *entry for pandemic influenza and other infectious diseases.*

1           (c) *COLLABORATION.*—*In developing methods under*  
2 *subsection (b), the Secretary may collaborate with other*  
3 *Federal agencies, as appropriate.*

4 **SEC. 412. EDUCATING THE PUBLIC ABOUT RADIOLOGICAL**  
5 **THREATS.**

6           (a) *PUBLIC AWARENESS CAMPAIGN.*—*The Secretary*  
7 *shall develop a public awareness campaign to enhance pre-*  
8 *paredness and collective response to a radiological attack,*  
9 *including the following:*

10               (1) *A clear explanation of the dangers associated*  
11 *with radioactive materials.*

12               (2) *Possible effects of different levels of radiation*  
13 *exposure, including a clear description of the how ra-*  
14 *diation exposure occurs and the amount of exposure*  
15 *necessary to be of concern.*

16               (3) *Actions that members of the public should*  
17 *take regarding evacuation, personal decontamination,*  
18 *and medical treatment.*

19           (b) *RECOVERY.*—*The Secretary shall develop a plan*  
20 *for postevent recovery from a radiological attack. Such plan*  
21 *shall include the following:*

22               (1) *A definition of the demarcation between re-*  
23 *sponse and recovery from a radiological attack.*

24               (2) *Consideration of multiple attack scenarios,*  
25 *including a worst-case scenario.*

1           (3) *Consideration of multiple recovery strategies,*  
2           *including decontamination, demolition and removal,*  
3           *and relocation.*

4           (4) *Consideration of economic, health, and psy-*  
5           *chological effects.*

6 **SEC. 413. RURAL RESILIENCE INITIATIVE.**

7           (a) *IN GENERAL.*—*The Under Secretary shall conduct*  
8           *research intended to assist State, local, and tribal leaders*  
9           *and the private sector in developing the tools and methods*  
10          *to enhance preparation for, and response and resilience to,*  
11          *terrorist events and other incidents.*

12          (b) *INCLUDED ACTIVITIES.*—*Activities under this sec-*  
13          *tion may include—*

14                 (1) *research and implementation through out-*  
15                 *reach activities with rural communities;*

16                 (2) *an examination of how communities employ*  
17                 *resilience capabilities and response assets;*

18                 (3) *a community resilience baseline template for*  
19                 *determining the resilience capacity of a rural commu-*  
20                 *nity;*

21                 (4) *a plan to address community needs for resil-*  
22                 *ience;*

23                 (5) *an education program for community leaders*  
24                 *and first responders about their resilience capacity*

1        *and mechanisms for mitigation, including via dis-*  
2        *tance learning; and*

3                *(6) a mechanism by which this research can*  
4        *serve as a model for adoption by communities across*  
5        *the Nation.*

6        **SEC. 414. SENSE OF CONGRESS REGARDING THE NEED FOR**  
7                        **INTEROPERABILITY STANDARDS FOR INTER-**  
8                        **NET PROTOCOL VIDEO SURVEILLANCE TECH-**  
9                        **NOLOGY.**

10        *It is the sense of Congress that—*

11                *(1) video surveillance systems that operate over*  
12        *the Internet are an emerging homeland security tech-*  
13        *nology that has the potential of significantly improv-*  
14        *ing homeland security forensic and analytical capa-*  
15        *bility;*

16                *(2) to realize the full security benefits of such*  
17        *emerging homeland security technology, there should*  
18        *be interoperability standards for such technology;*

19                *(3) the Directorate, working with other appro-*  
20        *priate Federal agencies, should encourage the private*  
21        *sector to develop interoperability standards for such*  
22        *emerging homeland security technology; and*

23                *(4) such efforts will help the Federal Govern-*  
24        *ment, which is one of the largest users of surveillance*

1       *technology, in detecting, deterring, preventing, and*  
2       *responding to terrorist attacks.*

3       **SEC. 415. HOMELAND SECURITY SCIENCE AND TECH-**  
4                                    **NOLOGY FELLOWS PROGRAM.**

5        *(a) IN GENERAL.—Title III of the Homeland Security*  
6        *Act of 2002 (6 U.S.C. 181 et seq.) is further amended by*  
7        *adding at the end the following new section:*

8        **“SEC. 319. HOMELAND SECURITY SCIENCE AND TECH-**  
9                                    **NOLOGY FELLOWS PROGRAM.**

10        *“(a) ESTABLISHMENT.—The Secretary, acting through*  
11        *the Under Secretary for Science and Technology, shall es-*  
12        *tablish a fellows program, to be known as the Homeland*  
13        *Security Science and Technology Fellows Program, under*  
14        *which the Under Secretary shall facilitate the temporary*  
15        *placement of scientists in relevant scientific or technological*  
16        *fields for up to two years in components of the Department*  
17        *with a need for scientific and technological expertise.*

18        **“(b) UTILIZATION OF FELLOWS.—**

19                *“(1) IN GENERAL.—Under the Program, the*  
20        *Under Secretary may employ fellows—*

21                        *“(A) for the use of the Directorate of Science*  
22                        *and Technology; or*

23                        *“(B) for the use of Department components*  
24                        *outside the Directorate, under an agreement with*  
25                        *the head of such a component under which the*

1           *component will reimburse the Directorate for the*  
2           *costs of such employment.*

3           “(2) *RESPONSIBILITIES.*—*Under such an agree-*  
4           *ment—*

5                   “(A) *the Under Secretary shall—*

6                           “(i) *solicit and accept applications*  
7                           *from individuals who are currently enrolled*  
8                           *in or who are graduates of post-graduate*  
9                           *programs in scientific and engineering*  
10                           *fields related to the promotion of securing*  
11                           *the homeland, including—*

12                                   “(I) *biological, chemical, physical,*  
13                                   *behavioral, social, health, medical, and*  
14                                   *computational sciences;*

15                                   “(II) *geosciences;*

16                                   “(III) *all fields of engineering;*  
17                                   *and*

18                                   “(IV) *such other disciplines as are*  
19                                   *determined relevant by the Secretary;*

20                                   “(ii) *screen applicant candidates and*  
21                                   *interview them as appropriate to ensure*  
22                                   *that they possess the appropriate level of*  
23                                   *scientific and engineering expertise and*  
24                                   *qualifications;*



1           “(iii) provide a list of qualified appli-  
2 cants to the heads of Department compo-  
3 nents seeking to utilize qualified fellows;

4           “(iv) pay financial compensation to  
5 such fellows;

6           “(v) coordinate with the Chief Security  
7 Officer to facilitate and expedite provision  
8 of security clearances to fellows, as appro-  
9 priate; and

10           “(vi) otherwise administer all aspects  
11 of the fellows’ employment with the Depart-  
12 ment; and

13           “(B) the head of the component utilizing the  
14 fellow shall—

15           “(i) select a fellow from the list of  
16 qualified applicants provided by the Under  
17 Secretary;

18           “(ii) reimburse the Under Secretary  
19 for the costs of employing the fellow selected;  
20 and

21           “(iii) be responsible for the day-to-day  
22 management of the fellow.

23           “(c) *APPLICATIONS FROM ASSOCIATIONS.*—The Under  
24 Secretary may accept applications under subsection  
25 (b)(2)(A) that are submitted by science or policy associa-

1 *tions on behalf of individuals whom such an association*  
2 *has determined may be qualified applicants under the pro-*  
3 *gram.”.*

4       **(b) CLERICAL AMENDMENT.**—*The table of contents in*  
5 *section 1(b) of such Act is further amended by adding at*  
6 *the end of the items relating to title III the following new*  
7 *item:*

*“Sec. 319. Homeland Security Science and Technology Fellows Program.”.*

8 **SEC. 416. BIOLOGICAL THREAT AGENT ASSAY EQUIVA-**  
9 **LENCY.**

10       **(a) IN GENERAL.**—*Title III (6 U.S.C. 181 et seq.) is*  
11 *further amended by adding at the end the following new*  
12 *section:*

13 **“SEC. 320. BIOLOGICAL THREAT AGENT ASSAY EQUIVA-**  
14 **LENCY PROGRAM.**

15       **(a) IN GENERAL.**—*To facilitate equivalent biological*  
16 *threat agent identification among federally operated bio-*  
17 *monitoring programs, the Under Secretary, in consultation*  
18 *with the Director of the Centers for Disease Control and*  
19 *Prevention, may implement an assay equivalency program*  
20 *for biological threat assays.*

21       **(b) FEATURES.**—*In order to establish assay perform-*  
22 *ance equivalency to support homeland security and public*  
23 *health security decisions, the program may—*

24               **(1)** *evaluate biological threat detection assays,*  
25 *their protocols for use, and their associated response*

1        *algorithms for confirmation of biological threat*  
2        *agents, taking performance measures and concepts of*  
3        *operation into consideration; and*

4                *“(2) develop assay equivalency standards based*  
5        *on the findings of the evaluation under paragraph*  
6        *(1).*

7        *“(c) UPDATE.—The Under Secretary shall update the*  
8        *program as necessary.*

9        *“(d) IMPLEMENTATION.—The Secretary shall—*

10                *“(1) require implementation of the standards de-*  
11        *veloped under subsection (b)(2) for all Department*  
12        *biomonitoring programs; and*

13                *“(2) make such standards available to support*  
14        *all other Federal biomonitoring programs.*

15        *“(e) ASSAY DEFINED.—In this section the term ‘assay’*  
16        *means any scientific test that is—*

17                *“(1) designed to detect the presence of a biologi-*  
18        *cal threat agent; and*

19                *“(2) of a type selected under criteria established*  
20        *by the Secretary.”.*

21        *(b) CLERICAL AMENDMENT.—The table of contents in*  
22        *section 1(b) is further amended by adding at the end of*  
23        *the items relating to title III the following new item:*

*“Sec. 320. Biological threat agent assay equivalency program.”.*

1 **SEC. 417. STUDY OF FEASIBILITY AND BENEFIT OF EXPAND-**  
2 **ING OR ESTABLISHING PROGRAM TO CREATE**  
3 **A NEW CYBERSECURITY CAPACITY BUILDING**  
4 **TRACK AT CERTAIN INSTITUTIONS OF HIGH-**  
5 **ER EDUCATION.**

6 (a) *IN GENERAL.*—*Within 90 days of enactment, the*  
7 *Secretary, in coordination with the National Science Foun-*  
8 *dation, shall commission a study by a nonprofit research*  
9 *institution to determine the feasibility and potential benefit*  
10 *of expanding the Federal Cyber Service Scholarship for*  
11 *Service Program, or establishing a parallel program, as*  
12 *methods to create a new cybersecurity or information assur-*  
13 *ance capacity building track at institutions of higher edu-*  
14 *cation that are not currently designated as a National Cen-*  
15 *ter of Academic Excellence in Information Assurance Edu-*  
16 *cation or a National Center of Academic Excellence in Re-*  
17 *search.*

18 (b) *SUBJECT MATTERS.*—*The study under subsection*  
19 *(a) shall include examinations of the following:*

20 (1) *The feasibility and potential benefit of allow-*  
21 *ing the following types of institutions into the exist-*  
22 *ing Federal Cyber Service program:*

23 (A) *Community colleges.*

24 (B) *Institutions offering an undergraduate*  
25 *degree, graduate degree, or post-graduate degree,*  
26 *but do not qualify under the existing program.*

1           (C) *Institutions offering a certificate or in-*  
2           *dustry-recognized credential.*

3           (2) *The feasibility and potential benefit of estab-*  
4           *lishing a new program modeled after the Federal*  
5           *Cyber Service program to build capacity at—*

6                   (A) *community colleges;*

7                   (B) *institutions offering an undergraduate*  
8                   *degree, graduate degree, or post-graduate degree,*  
9                   *but do not qualify under the existing program;*  
10                  *or*

11                  (C) *institutions offering a certificate or in-*  
12                  *dustry-recognized credential.*

13           (3) *The projected extent to which an expansion*  
14           *of the existing Federal Cyber Service program as de-*  
15           *scribed in paragraph (1) would—*

16                   (A) *expand the availability of qualified in-*  
17                   *dividuals to work in information assurance and*  
18                   *cybersecurity within the Department and other*  
19                   *Federal, State, local, and tribal agencies, and the*  
20                   *private sector;*

21                   (B) *encourage institutions of higher edu-*  
22                   *cation to develop a new information assurance*  
23                   *or cybersecurity education undergraduate degree*  
24                   *programs, graduate degree programs, or pro-*

1            *grams conferring a certificate or industry-recog-*  
2            *nized credential;*

3            *(C) increase the number of students grad-*  
4            *uating annually from existing information as-*  
5            *urance or cybersecurity education under-*  
6            *graduate degree programs, graduate degree pro-*  
7            *grams, or programs conferring a certificate or*  
8            *industry-recognized credential; or*

9            *(D) improve existing information assurance*  
10           *or cybersecurity education undergraduate degree*  
11           *programs, graduate degree programs, or pro-*  
12           *grams conferring a certificate or industry-recog-*  
13           *nized credential.*

14           *(4) The projected extent to which the establish-*  
15           *ment of a new program modeled after the Federal*  
16           *Cyber Service program as described in paragraph (2)*  
17           *would—*

18           *(A) expand the availability of qualified in-*  
19           *dividuals to work in information assurance and*  
20           *cybersecurity within the Department and other*  
21           *Federal, State, local, and tribal agencies, and the*  
22           *private sector;*

23           *(B) encourage institutions of higher edu-*  
24           *cation to develop a new information assurance*  
25           *or cybersecurity education undergraduate degree*

1            *programs, graduate degree programs, or pro-*  
2            *grams conferring a certificate or industry-recog-*  
3            *nized credential;*

4            *(C) increase the number of students grad-*  
5            *uating annually from existing information as-*  
6            *surance or cybersecurity education under-*  
7            *graduate degree programs, graduate degree pro-*  
8            *grams, or programs conferring a certificate or*  
9            *industry-recognized credential; or*

10           *(D) improve existing information assurance*  
11           *or cybersecurity education undergraduate degree*  
12           *programs, graduate degree programs, or pro-*  
13           *grams conferring a certificate or industry-recog-*  
14           *nized credential.*

15           *(c) REPORT.—Not later than 30 days after receiving*  
16           *the findings of the study, the Secretary shall transmit the*  
17           *findings, together with any comments thereon by the Sec-*  
18           *retary, to the appropriate congressional committees.*

19           **SEC. 418. SENSE OF CONGRESS REGARDING CENTERS OF**  
20           **EXCELLENCE.**

21           *It is the sense of Congress that centers of excellence*  
22           *have the potential—*

23           *(1) to be a very useful tool in developing defen-*  
24           *sive countermeasures to secure critical infrastructure*  
25           *and prevent terrorism; and*

1           (2) to play a key role in the Department's efforts  
2           to research and develop new technologies to secure the  
3           homeland.

4 **SEC. 419. ASSESSMENT, RESEARCH, TESTING, AND EVALUA-**  
5                                   **TION OF TECHNOLOGIES TO MITIGATE THE**  
6                                   **THREAT OF SMALL VESSEL ATTACK.**

7           *The Under Secretary may—*

8                   (1) *assess what technologies are available to*  
9                   *mitigate the threat of small vessel attack in secure*  
10                  *zones of ports, including the use of transponders or*  
11                  *radio frequency identification devices to track small*  
12                  *vessels; and*

13                  (2) *conduct research, testing, and evaluation of*  
14                  *new technologies that might be capable of tracking*  
15                  *small vessels.*

16 **SEC. 420. RESEARCH AND DEVELOPMENT PROJECTS.**

17           *Section 831 (6 U.S.C. 391) is amended—*

18                   (1) *in subsection (a), by striking “2010,” and*  
19                   *inserting “2012,”;*

20                   (2) *in subsection (a), by adding at the end the*  
21                   *following new paragraph:*

22                           “(3) *PRIOR APPROVAL.—In any case in which*  
23                           *the Under Secretary for Science and Technology in-*  
24                           *tends to exercise other transaction authority, the*  
25                           *Under Secretary must receive prior approval from the*



1        *Secretary after submitting to the Secretary a proposal*  
2        *that includes the rationale for why a grant or con-*  
3        *tract issued in accordance with the Federal Acquisi-*  
4        *tion Regulation is not feasible or appropriate and the*  
5        *amount to be expended for such project. In such a*  
6        *case, the authority for evaluating the proposal may*  
7        *not be delegated by the Secretary to anyone other*  
8        *than the Under Secretary for Management.”; and*

9                *(3) by redesignating subsection (e) as subsection*  
10              *(i), and by inserting after subsection (d) the following*  
11              *new subsections:*

12              *“(e) ANNUAL REPORT ON EXERCISE OF OTHER*  
13              *TRANSACTION AUTHORITY.—*

14                      *“(1) IN GENERAL.—The Secretary shall submit*  
15                      *to the appropriate congressional committees an an-*  
16                      *nual report on the exercise of other transaction au-*  
17                      *thority.*

18                      *“(2) CONTENT.—The report shall include the fol-*  
19                      *lowing:*

20                              *“(A) The subject areas in which research*  
21                              *projects were conducted using other transaction*  
22                              *authority.*

23                              *“(B) The extent of cost-sharing for such*  
24                              *projects among Federal and non-Federal sources.*

1           “(C) *The extent to which use of other trans-*  
2           *action authority has addressed a homeland secu-*  
3           *rity capability gap identified by the Department*  
4           *of Homeland Security.*

5           “(D) *The total amount of payments, if any,*  
6           *that were received by the Federal Government as*  
7           *a result of such exercise of other transaction au-*  
8           *thority during the period covered by the report.*

9           “(E) *The rationale for using other trans-*  
10          *action authority, including why grants or con-*  
11          *tracts issued in accordance with the Federal Ac-*  
12          *quisition Regulation were not feasible or appro-*  
13          *priate.*

14          “(F) *the amount expended for each such*  
15          *project.*

16          “(f) *TRAINING.—The Secretary shall develop a train-*  
17          *ing program for acquisitions staff in the use of other trans-*  
18          *action authority to help ensure the appropriate use of such*  
19          *authority.*

20          “(g) *REVIEW AUTHORITY.—The exercise of other trans-*  
21          *action authority shall be subject to review by the Comp-*  
22          *troller General of the United States to ensure that an agen-*  
23          *cy is not attempting to avoid the requirements of procure-*  
24          *ment statutes and regulations.*

1       “(h) *OTHER TRANSACTION AUTHORITY DEFINED.*—In  
2 *this section the term ‘other transaction authority’ means*  
3 *authority under subsection (a).’*”.

4 **SEC. 421. NATIONAL URBAN SECURITY TECHNOLOGY LAB-**  
5 **ORATORY.**

6       (a) *IN GENERAL.*—The National Urban Security Tech-  
7 *nology Laboratory (formerly the Environmental Measure-*  
8 *ments Laboratory) is authorized within the Directorate for*  
9 *fiscal years 2011 and 2012.*

10       (b) *RESPONSIBILITIES.*—The Under Secretary shall  
11 *utilize the National Urban Security Technology Laboratory*  
12 *to test, evaluate, and analyze homeland security capabilities*  
13 *and serve as a technical authority to first responders and*  
14 *State and local entities, including by—*

15               (1) *conducting test programs, pilots projects,*  
16 *demonstrations, and other forms of evaluations of*  
17 *homeland security technologies both in the field and*  
18 *in the laboratory;*

19               (2) *applying knowledge of operational end-user*  
20 *environments and support for operational integration*  
21 *to technology development, including—*

22                       (A) *training;*

23                       (B) *exercises;*

24                       (C) *equipment;*

25                       (D) *tactics;*

1                   (E) techniques; and

2                   (F) procedures;

3                   (3) representing interests and requirements be-  
4           tween technology developers and operational end-  
5           users; and

6                   (4) supporting development and use of homeland  
7           security equipment and operational standards.

8           **TITLE V—DOMESTIC NUCLEAR**  
9           **DETECTION OFFICE**

10 **SEC. 501. AUTHORIZATION OF APPROPRIATIONS.**

11           *There is authorized to be appropriated for the Domes-*  
12 *tic Nuclear Detection Office of the Department—*

13                   (1) \$305,840,000 for fiscal year 2011; and

14                   (2) \$315,005,000 for fiscal year 2012.

15 **SEC. 502. DOMESTIC NUCLEAR DETECTION OFFICE OVER-**  
16 **SIGHT.**

17           (a) *SENSE OF CONGRESS.—It is the sense of Congress*  
18 *that the Directorate should conduct basic and innovative*  
19 *research and nondevelopmental testing on behalf of the Do-*  
20 *mestic Nuclear Detection Office (in this section referred to*  
21 *as “DNDO”), in order to advance next generation nuclear*  
22 *detection technologies.*

23           (b) *INTERNAL REVIEW OF PROJECT SELECTION AND*  
24 *EVALUATION METHODOLOGY.—Not later than 90 days after*  
25 *the date of enactment of this Act, the Director of the DNDO*

1 *shall begin an internal review of the methodology by which*  
2 *research, development, testing, and evaluation is identified,*  
3 *prioritized, and funded by the DNDO. In conducting such*  
4 *review, the Director shall consult with the Under Secretary*  
5 *and the heads of all operational components of the Depart-*  
6 *ment that own, operate, or maintain nuclear or radiological*  
7 *detection technologies.*

8 (c) *CONTENTS OF REVIEW.*—*In carrying out the re-*  
9 *view under subsection (b), the Director of the DNDO shall—*

10 (1) *identify the process by which basic and ap-*  
11 *plied research and operational testing that should be*  
12 *conducted in concert and under agreement with the*  
13 *Directorate;*

14 (2) *describe the roles, responsibilities, common*  
15 *definitions, standard operating procedures, and deci-*  
16 *sion process for research, development, testing, and*  
17 *evaluation activities;*

18 (3) *describe and implement a transparent system*  
19 *for tracking research, development, testing, and eval-*  
20 *uation requirements;*

21 (4) *describe and implement a mechanism to pro-*  
22 *vide regular updates to components of the Department*  
23 *on the progress of such research;*

24 (5) *evaluate the degree to which needs of the*  
25 *operational components of the Department and State*

1        *and local first responders are being adequately ad-*  
2        *dressed by the existing project selection process, and*  
3        *if not, how such process can be improved;*

4            *(6) establish a method to collect and evaluate De-*  
5        *partment component feedback;*

6            *(7) utilize departmental matrices and systems to*  
7        *determine if technologies produced by the Directorate*  
8        *have enhanced the ability of Department components*  
9        *to perform their missions;*

10           *(8) identify appropriate five-year levels of invest-*  
11        *ment in basic and applied research and development,*  
12        *in particular among the Department laboratories,*  
13        *federally funded research and development centers,*  
14        *university-based centers, Department of Energy na-*  
15        *tional laboratories, and other Federal laboratories;*

16           *(9) project balance of use of the entities referred*  
17        *to in paragraph (8) among the Directorate and other*  
18        *Department components; and*

19           *(10) establish a formal merit review process,*  
20        *with external peer review where appropriate.*

21        *(d) REPORT.—Not later than one year after the com-*  
22        *pletion of the review required by subsection (b), the Director*  
23        *of the DNDO shall submit to the Secretary and the appro-*  
24        *priate congressional committees a report containing the*  
25        *findings of such review, together with information on the*

1 *systems, methods, and mechanisms established, and rec-*  
2 *ommendations for additional improvements.*

3       (e) *UPDATES ON IMPLEMENTATION.—One hundred*  
4 *and twenty days after the date of enactment of this Act,*  
5 *and annually thereafter, the Inspector General of the De-*  
6 *partment shall submit to the appropriate congressional*  
7 *committees an update on the status of implementation of*  
8 *this section and activities in support of such implementa-*  
9 *tion.*

10 **SEC. 503. STRATEGIC PLAN AND FUNDING ALLOCATIONS**  
11                               **FOR GLOBAL NUCLEAR DETECTION ARCHI-**  
12                               **TECTURE.**

13       *Not later than 180 days after the date of enactment*  
14 *of this Act, the Secretary shall submit to the appropriate*  
15 *congressional committees a report containing the following:*

16               (1) *A strategic plan for the global nuclear detec-*  
17 *tion architecture to deter and detect the transport of*  
18 *nuclear or radioactive materials by all means pos-*  
19 *sible, with specific focus on establishing the goals, ob-*  
20 *jectives, and cost projections for the next five years,*  
21 *including a discussion of—*

22                       (A) *technological and nontechnological*  
23 *methods to increase detection capabilities;*

1           (B) the preventive nature of the global nu-  
2           clear detection architecture, including projected  
3           impact on would-be terrorists;

4           (C) detection capability enhancements for  
5           the various transportation modes, at ports of  
6           entry and between ports of entry;

7           (D) balanced risk-based deployment of de-  
8           tection assets across all border and other path-  
9           ways; and

10          (E) any emerging threat vectors identified  
11          by the Director of the Domestic Nuclear Detec-  
12          tion Office.

13          (2) In consultation with the Secretary of De-  
14          fense, the Secretary of Energy, the Secretary of State,  
15          the Nuclear Regulatory Commission, the Intelligence  
16          Community, and the Attorney General, an analysis of  
17          overall budget allocations that determines whether  
18          Governmentwide nuclear detection resources clearly  
19          align with identified priorities to maximize results  
20          and minimize duplication of efforts.

21 **SEC. 504. RADIATION PORTAL MONITOR ALTERNATIVES.**

22          (a) SENSE OF CONGRESS.—It is the sense of Congress  
23          that in view of the Secretary’s decision not to certify ad-  
24          vanced spectroscopic portal monitors for primary screening  
25          applications because they do not offer a significant increase



1 *in operational effectiveness over existing technology, the Di-*  
2 *rector must attempt to identify viable alternatives.*

3       **(b) ANALYSIS AND REPORT.**—*The Director of the Do-*  
4 *mestic Nuclear Detection Office shall analyze and report to*  
5 *the appropriate congressional committees by not later than*  
6 *90 days after the date of enactment of this Act on both exist-*  
7 *ing and developmental alternatives to existing radiation*  
8 *portal monitors and advanced spectroscopic portal monitors*  
9 *that would provide the Department with a significant in-*  
10 *crease in operational effectiveness for primary screening for*  
11 *radioactive materials.*

12 **SEC. 505. AUTHORIZATION OF SECURING THE CITIES INI-**  
13 **TIATIVE.**

14       **(a) FINDINGS.**—*Congress finds the following:*

15               **(1)** *The Securing the Cities Initiative of the De-*  
16 *partment uses next generation radiation detection*  
17 *technology to detect the transport of nuclear and radi-*  
18 *ological material in urban areas by terrorists or other*  
19 *unauthorized individuals.*

20               **(2)** *The technology used by partners in the Se-*  
21 *curing the Cities Initiative leverages radiation detec-*  
22 *tion technology used at ports of entry.*

23               **(3)** *The Securing the Cities Initiative has fos-*  
24 *tered unprecedented collaboration and coordination*  
25 *among its Federal, State, and local partners.*

1           (4) *The Securing the Cities Initiative is a crit-*  
 2           *ical national capability to detect the dangerous intro-*  
 3           *duction of nuclear and radiological material.*

4           (b) *AUTHORIZATION OF APPROPRIATIONS.—Of*  
 5           *amounts authorized by section 501, there is authorized to*  
 6           *be appropriated to the Director of the Domestic Nuclear De-*  
 7           *tection Office of the Department for the Securing the Cities*  
 8           *Initiative such sums as may be necessary for each of fiscal*  
 9           *years 2011 and 2012, including—*

10           (1) *for each city in which it has been imple-*  
 11           *mented by fiscal year 2009—*

12                     (A) *\$20,000,000 for fiscal year 2011; and*

13                     (B) *\$10,000,000 for fiscal year 2012; and*

14           (2) *for additional Securing the Cities initiatives*  
 15           *to be implemented in not fewer than 2 sites partici-*  
 16           *pating in the Urban Area Security Initiative, such*  
 17           *sums as may be necessary each fiscal year to imple-*  
 18           *ment and sustain each additional initiative.*

19                     **TITLE VI—CLARIFYING**  
 20                     **AMENDMENTS**

21           **SEC. 601. FEDERALLY FUNDED RESEARCH AND DEVELOP-**  
 22                     **MENT CENTERS.**

23           *Section 305 (6 U.S.C. 184) is amended—*

24                     (1) *by inserting “(a) ESTABLISHMENT.—” before*  
 25           *the first sentence; and*

1           (2) *by adding at the end the following new sub-*  
2           *sections:*

3           “(b) *CONGRESSIONAL TASKING.*—*Upon a request of*  
4 *the chairman and the ranking minority member of an ap-*  
5 *propriate congressional committee, a federally funded re-*  
6 *search and development center established under this section*  
7 *may perform independent analysis of homeland security*  
8 *issues and report its findings to the appropriate congres-*  
9 *sional committees and the Secretary.*

10          “(c) *CONGRESSIONAL OVERSIGHT.*—*Federally funded*  
11 *research and development centers established under this sec-*  
12 *tion are encouraged, upon request of the chairman and the*  
13 *ranking minority member of an appropriate congressional*  
14 *committee, to provide to the committee a copy of any report*  
15 *it produces for the Department or any of its components.*

16          “(d) *CONFLICTS OF INTEREST.*—*The Secretary shall*  
17 *review and revise, as appropriate, the policies of the De-*  
18 *partment relating to personnel conflicts of interest to ensure*  
19 *that such policies specifically address employees of federally*  
20 *funded research and development centers established under*  
21 *this section who are in a position to make or materially*  
22 *influence research findings or agency decisionmaking.*

23          “(e) *ANNUAL REPORTS.*—*Each federally funded re-*  
24 *search and development center established under this section*  
25 *shall transmit to the Secretary and appropriate congres-*

1 sional committees an annual report on the activities of the  
2 center.”.

3 **SEC. 602. ELIMINATION OF HOMELAND SECURITY INSTI-**  
4 **TUTE.**

5 (a) *REPEAL.*—Section 312 (6 U.S.C. 192) is repealed.

6 (b) *CLERICAL AMENDMENT.*—The table of contents in  
7 section 1(b) is amended by striking the item relating to such  
8 section.

9 **SEC. 603. GAO STUDY OF THE IMPLEMENTATION OF THE**  
10 **STATUTORY RELATIONSHIP BETWEEN THE**  
11 **DEPARTMENT AND THE DEPARTMENT OF EN-**  
12 **ERGY NATIONAL LABORATORIES.**

13 (a) *IN GENERAL.*—Not later than 120 days after the  
14 date of the enactment of this Act, the Comptroller General  
15 of the United States shall—

16 (1) *conduct a study to assess the implementation*  
17 *of the statutory relationship between the Department*  
18 *and the Department of Energy national laboratories,*  
19 *as established by section 309(a)(2) of the Homeland*  
20 *Security Act of 2002 (6 U.S.C. 189(a)(2)); and*

21 (2) *submit recommendations to the appropriate*  
22 *congressional committees for appropriate improve-*  
23 *ments to such relationship.*

24 (b) *STUDY SUBJECTS.*—The study shall include the fol-  
25 *lowing:*

1           (1) *Review of how the Department and the De-*  
2 *partment of Energy national laboratories—*

3           (A) *communicate needs and capabilities;*

4           *and*

5           (B) *select projects to be performed by the*  
6 *Department of Energy national laboratories*  
7 *under such statutory relationship.*

8           (2) *Review of contracting mechanisms that the*  
9 *Department and the Department of Energy national*  
10 *laboratories use to initiate and track work under such*  
11 *statutory relationship.*

12           (3) *Review of the fraction of Department of En-*  
13 *ergy national laboratory work performed for the De-*  
14 *partment under such statutory relationship, compared*  
15 *to other Department of Energy national laboratory*  
16 *work performed for the Department on a “work for*  
17 *others” basis.*

18           (4) *Review of the cost savings to the Department*  
19 *and the Department of Energy achieved through use*  
20 *of such statutory relationship, compared to other De-*  
21 *partment of Energy national laboratory work per-*  
22 *formed for the Department on a “work for others”*  
23 *basis.*

1 **TITLE VII—COMMISSION ON THE**  
2 **PROTECTION OF CRITICAL**  
3 **ELECTRIC AND ELECTRONIC**  
4 **INFRASTRUCTURES**

5 **SEC. 701. COMMISSION ON THE PROTECTION OF CRITICAL**  
6 **ELECTRIC AND ELECTRONIC INFRASTRUC-**  
7 **TURES.**

8 (a) *ESTABLISHMENT.*—*There is established the Com-*  
9 *mission on the Protection of Critical Electric and Elec-*  
10 *tronic Infrastructures (in this section referred to as the*  
11 *“Commission”).*

12 (b) *PURPOSES.*—

13 (1) *IN GENERAL.*—*The purposes of the Commis-*  
14 *sion are to—*

15 (A) *assess vulnerabilities of electric and*  
16 *electronic infrastructures, including—*

17 (i) *all components of the United States*  
18 *electric grid, including electricity genera-*  
19 *tion, transmission, distribution and meter-*  
20 *ing; and*

21 (ii) *all computerized control systems*  
22 *used in all United States critical infra-*  
23 *structure sectors;*

24 (B) *provide a clear and comprehensive*  
25 *strategy and specific recommendations for pro-*

1           *tecting these critical electric and electronic infra-*  
2           *structures; and*

3                   *(C) test, evaluate, and report on specific*  
4           *mitigation protection and recovery devices or*  
5           *methods.*

6           *(2) IN PARTICULAR.—The Commission shall give*  
7           *particular attention to threats that can disrupt or*  
8           *damage critical electric and electronic infrastructures,*  
9           *including—*

10                   *(A) cyber attacks or unintentional cyber*  
11           *disruption;*

12                   *(B) electromagnetic phenomena such as*  
13           *geomagnetically induced currents, intentional*  
14           *electromagnetic interference, and electromagnetic*  
15           *pulses caused by nuclear weapons; and*

16                   *(C) other physical attack, act of nature, or*  
17           *accident.*

18           *(c) COMPOSITION OF COMMISSION.—*

19                   *(1) MEMBERS.—The Commission shall be com-*  
20           *posed of 9 members, of whom—*

21                   *(A) 1 member shall be appointed by the*  
22           *Chairman of the House of Representatives Com-*  
23           *mittee on Homeland Security;*

1           (B) 1 member shall be appointed by the  
2 ranking minority member of the House of Rep-  
3 resentatives Committee on Homeland Security;

4           (C) 1 member shall be appointed by the  
5 Chairman of the House of Representatives Com-  
6 mittee on Energy and Commerce;

7           (D) 1 member shall be appointed by the  
8 ranking minority member of the House of Rep-  
9 resentatives Committee on Energy and Com-  
10 merce;

11           (E) 1 member shall be appointed by the  
12 Chairman of the Senate Committee on Home-  
13 land Security and Governmental Affairs;

14           (F) 1 member shall be appointed by the  
15 ranking minority member of the Senate Com-  
16 mittee on Homeland Security and Governmental  
17 Affairs;

18           (G) 1 member shall be appointed by the  
19 Chairman of the Senate Committee on Energy  
20 and Natural Resources;

21           (H) 1 member shall be appointed by the  
22 ranking minority member of the Senate Com-  
23 mittee on Energy and Natural Resources; and

24           (I) 1 member who shall serve as the Chair-  
25 man of the Commission, and who shall be ap-



1           *pointed by the Speaker of the House of Rep-*  
2           *resentatives with the concurrence of the President*  
3           *Pro Tempore of the Senate.*

4           (2) *QUALIFICATIONS.*—*It is the sense of Congress*  
5           *that individuals appointed to the Commission should*  
6           *be United States citizens, with significant depth of ex-*  
7           *perience in electric and electronic infrastructures,*  
8           *their function, and their protection, as well as the*  
9           *threats to these infrastructures as identified in sub-*  
10          *section (b)(2).*

11          (3) *DEADLINE FOR APPOINTMENT.*—*All members*  
12          *of the Commission shall be appointed within 30 days*  
13          *after the date of enactment of this Act.*

14          (4) *INITIAL MEETING.*—*The Commission shall*  
15          *meet and begin the operations of the Commission as*  
16          *soon as practicable.*

17          (5) *QUORUM; VACANCIES.*—*After its initial meet-*  
18          *ing, the Commission shall meet upon the call of the*  
19          *Chairman or a majority of its members. Six members*  
20          *of the Commission shall constitute a quorum. Any va-*  
21          *cancy in the Commission shall not affect its powers,*  
22          *but shall be filled in the same manner in which the*  
23          *original appointment was made.*

24          (d) *RESPONSIBILITIES OF COMMISSION.*—*The Com-*  
25          *mission shall address—*

1           (1) *the quantification of the threats identified in*  
2           *subsection (b)(2) to the United States electric and*  
3           *electronic infrastructure, and a cost-benefit analysis*  
4           *of possible protection and recovery strategies;*

5           (2) *the roles, missions, and structure of all rel-*  
6           *evant Federal, State, and local government depart-*  
7           *ments and agencies with responsibilities for ensuring*  
8           *protection and reliability for electric and electronic*  
9           *infrastructures;*

10          (3) *the roles, missions, and structure of all rel-*  
11          *evant private sector entities with responsibilities for*  
12          *ensuring protection and reliability for electric and*  
13          *electronic infrastructures;*

14          (4) *inter-agency coordination between and*  
15          *among the entities identified in paragraphs (2) and*  
16          *(3); and*

17          (5) *recommendations for protections and recov-*  
18          *ery devices and measures.*

19          (e) *POWERS OF COMMISSION.—*

20               (1) *HEARINGS AND EVIDENCE.—The Commission*  
21               *or, on the authority of the Commission, any sub-*  
22               *committee or member thereof, may, for the purpose of*  
23               *carrying out this section, hold such hearings and sit*  
24               *and act at such times and places, take such testi-*  
25               *mony, receive such evidence, and administer such*

1        *oaths as the Commission or such designated sub-*  
2        *committee or designated member may determine ad-*  
3        *visable.*

4            (2) *CONTRACTING.—The Commission may, to*  
5        *such extent and in such amounts as are provided in*  
6        *appropriations Acts, enter into contracts to enable the*  
7        *Commission to discharge its duties under this subtitle.*

8            (3) *STAFF OF COMMISSION.—*

9            (A) *APPOINTMENT AND COMPENSATION.—*

10        *The Chairman of the Commission, in accordance*  
11        *with rules agreed upon by the Commission, may*  
12        *appoint and fix the compensation of a staff di-*  
13        *rector and such other personnel as may be nec-*  
14        *essary to enable the Commission to carry out its*  
15        *functions, without regard to the provisions of*  
16        *title 5, United States Code, governing appoint-*  
17        *ments in the competitive service, and without re-*  
18        *gard to the provisions of chapter 51 and sub-*  
19        *chapter III of chapter 53 of such title relating to*  
20        *classification and General Schedule pay rates,*  
21        *except that no rate of pay fixed under this sub-*  
22        *section may exceed the equivalent of that payable*  
23        *for a position at level I of the Executive Schedule*  
24        *under section 5316 of title 5, United States Code.*

1                   (B) *PERSONNEL AS FEDERAL EMPLOY-*  
2 *EES.—*

3                   (i) *IN GENERAL.—The executive direc-*  
4 *tor and any employees of the Commission*  
5 *shall be employees under section 2105 of*  
6 *title 5, United States Code, for purposes of*  
7 *chapters 63, 81, 83, 84, 85, 87, 89, and 90*  
8 *of that title.*

9                   (ii) *MEMBERS OF COMMISSION.—Sub-*  
10 *paragraph (A) shall not be construed to*  
11 *apply to members of the Commission.*

12                  (C) *DETAILEES.—Any Federal Government*  
13 *employee may be detailed to the Commission*  
14 *without reimbursement from the Commission,*  
15 *and such detailee shall retain the rights, status,*  
16 *and privileges of his or her regular employment*  
17 *without interruption.*

18                  (D) *CONSULTANT SERVICES.—The Commis-*  
19 *sion may procure the services of experts and con-*  
20 *sultants in accordance with section 3109 of title*  
21 *5, United States Code, but at rates not to exceed*  
22 *the daily rate paid a person occupying a posi-*  
23 *tion at level I of the Executive Schedule under*  
24 *section 5315 of title 5, United States Code.*

1           (E) *SECURITY CLEARANCES.*—*The Chair-*  
2           *man shall place an emphasis on hiring and re-*  
3           *taining employees, contractors, and detailees*  
4           *with active security clearances. For employees*  
5           *who do not have security clearances but are de-*  
6           *termined by the Chairman to need them, the*  
7           *Central Intelligence Agency, Department of En-*  
8           *ergy, Department of Defense, and any other rel-*  
9           *evant agency shall expedite the necessary clear-*  
10          *ance processes.*

11          (F) *FORMER EMP COMMISSION STAFF AND*  
12          *RESOURCES.*—*The Chairman may make use of*  
13          *any existing and viable staff and resources pre-*  
14          *viously employed by the Commission to Assess*  
15          *the Threat to the United States from Electro-*  
16          *magnetic Pulse Attack established by section*  
17          *1401 of Public Law 106–398 (114 Stat. 1654A–*  
18          *345).*

19          (4) *INFORMATION FROM FEDERAL AGENCIES.*—

20               (A) *IN GENERAL.*—*The Commission may se-*  
21               *ecure directly from any executive department, bu-*  
22               *reau, agency, board, commission, office, inde-*  
23               *pendent establishment, or instrumentality of the*  
24               *Government, information, suggestions, estimates,*  
25               *and statistics for the purposes of this section.*

1        *Each department, bureau, agency, board, com-*  
2        *mission, office, independent establishment, or in-*  
3        *strumentality shall, to the extent authorized by*  
4        *law, furnish such information, suggestions, esti-*  
5        *mates, and statistics directly to the Commission,*  
6        *upon request made by the Chairman, the chair-*  
7        *man of any subcommittee created by a majority*  
8        *of the Commission, or any member designated by*  
9        *a majority of the Commission.*

10            *(B) RECEIPT, HANDLING, STORAGE, AND*  
11            *DISSEMINATION.—Information shall only be re-*  
12            *ceived, handled, stored, and disseminated by*  
13            *members of the Commission and its staff con-*  
14            *sistent with all applicable statutes, regulations,*  
15            *and Executive orders.*

16            *(5) ASSISTANCE FROM FEDERAL AGENCIES.—*

17            *(A) GENERAL SERVICES ADMINISTRA-*  
18            *TION.—The Administrator of General Services*  
19            *shall provide to the Commission on a reimburs-*  
20            *able basis and as necessary, administrative sup-*  
21            *port and other services for the performance of the*  
22            *Commission's functions.*

23            *(B) OTHER DEPARTMENTS AND AGEN-*  
24            *CIES.—In addition to the assistance prescribed*  
25            *in paragraph (1), departments and agencies of*

1           *the United States may provide to the Commis-*  
2           *sion such services, funds, facilities, staff, and*  
3           *other support services as they may determine ad-*  
4           *visable and as may be authorized by law.*

5           (6) *GIFTS.*—*The Commission may accept, use,*  
6           *and dispose of gifts or donations of services or prop-*  
7           *erty.*

8           (7) *POSTAL SERVICES.*—*The Commission may*  
9           *use the United States mails in the same manner and*  
10          *under the same conditions as departments and agen-*  
11          *cies of the United States.*

12          (f) *PUBLIC MEETINGS AND RELEASE OF PUBLIC*  
13          *VERSIONS OF REPORTS.*—*The Commission shall—*

14                 (1) *hold public hearings and meetings to the ex-*  
15                 *tent appropriate;*

16                 (2) *release public versions of the report required*  
17                 *under subsection (g); and*

18                 (3) *conduct any public hearing in a manner*  
19                 *consistent with the protection of sensitive or classified*  
20                 *information provided to or developed for or by the*  
21                 *Commission as required by any applicable statute,*  
22                 *regulation, or Executive order.*

23          (g) *REPORT.*—*Not later than 180 days after the ap-*  
24          *pointment of the Commission, and annually thereafter, the*  
25          *Commission shall submit to the President and Congress a*

1 *report containing such findings, conclusions, and rec-*  
2 *ommendations for protection and recovery measures for*  
3 *electric and electronic infrastructures as have been agreed*  
4 *to by a majority of Commission members.*

5       *(h) FUNDING.—Of the amounts authorized by section*  
6 *101, there is authorized to be appropriated for the activities*  
7 *of the Commission under this section—*

8               *(1) \$4,000,000 for fiscal year 2011; and*

9               *(2) \$4,000,000 for fiscal year 2012.*





Union Calendar No. 292

11<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

**H. R. 4842**

[Report No. 111-486, Part I]

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**A BILL**

To authorize appropriations for the Directorate of Science and Technology of the Department of Homeland Security for fiscal years 2011 and 2012, and for other purposes.

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JUNE 25, 2010

Committee on Science and Technology discharged; committed to the Committee of the Whole House on the State of the Union and ordered to be printed