

**AMENDMENT IN THE NATURE OF A SUBSTITUTE
TO H.R. 4842
OFFERED BY MR. THOMPSON OF MISSISSIPPI**

Strike all after the enacting clause and insert the following:

1 SECTION 1. SHORT TITLE.

2 This Act may be cited as the “Homeland Security
3 Science and Technology Authorization Act of 2010”.

4 SEC. 2. TABLE OF CONTENTS.

5 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.

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
7 of the House of Representatives or the Senate hav-
8 ing legislative jurisdiction under the rules of the
9 House of Representatives or Senate, respectively,
10 over the matter 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
9 Secretary” means the Under Secretary for Science
10 and 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
14 of an amendment to, or repeal of, a provision, the ref-
15 erence shall be considered to be made to a provision of
16 the Homeland Security Act of 2002 (6 U.S.C. 101 et
17 seq.).

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

20 **SEC. 101. AUTHORIZATION OF APPROPRIATIONS.**

21 There are authorized to be appropriated to the Under
22 Secretary \$1,121,664,000 for fiscal year 2011 and
23 \$1,155,313,920 for fiscal year 2012 for the necessary ex-
24 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.
7 161 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. 236. RESEARCH PRIORITIZATION AND REQUIRE-**
16 **MENTS.**

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

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

1 for Management, the Director of the Office of Risk
2 Management and Analysis, and the heads of oper-
3 ational components of the Department; and

4 “(2) to the greatest extent possible, seek to
5 publicize the requirements for the purpose of inform-
6 ing the Federal, State, and local governments, first
7 responders, 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
12 Department;

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

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

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

3 “(5) describe the processes to be used by the
4 Directorate to strengthen first responder participa-
5 tion 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
11 Department;

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

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

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

22 “(c) ACTIVITIES IN SUPPORT OF THE RESEARCH
23 PRIORITIZATION AND REQUIREMENTS.—Not later than
24 one year after the date of the issuance of the require-
25 ments, the 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
4 the Directorate’s customers in the Department to
5 better identify and prioritize homeland security ca-
6 pability gaps that may be addressed by a techno-
7 logical solution based on the assessment required
8 under section 237(a)(2);

9 “(2) establish a system to collect feedback from
10 customers of the Directorate on the performance of
11 the Directorate, that includes metrics for measuring
12 customer 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 require-
16 ments.

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

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

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

7 “(A) a national-level risk assessment, de-
8 scribing and prioritizing the greatest risks to
9 the homeland, that includes vulnerability stud-
10 ies, asset values (including asset values for in-
11 tangible assets), estimated rates of occurrence,
12 countermeasures employed, loss expectancy,
13 cost/benefit analyses, and other practices gen-
14 erally associated with producing a comprehen-
15 sive risk analysis;

16 “(B) an analysis of the Directorate’s ap-
17 proach to mitigating the homeland security
18 risks identified under subparagraph (A)
19 through basic and applied research, develop-
20 ment, demonstration, testing, and evaluation
21 activities;

22 “(C) an analysis, based on statistics and
23 metrics, of the effectiveness of the Directorate
24 in reducing the homeland security risks identi-
25 fied under subparagraph (A) through the de-

1 ployment of homeland security technologies re-
2 searched or developed by the Directorate;

3 “(D) recommendations for how the Direc-
4 torate should modify or amend its research and
5 development activities in order to reduce the
6 risks to the homeland identified under subpara-
7 graph (A);

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

13 “(F) a description of input from other rel-
14 evant Federal, State, or local agencies and rel-
15 evant private sector entities in conducting the
16 risk analysis required by subparagraph (A); and

17 “(2) conduct research and development on ways
18 to most effectively communicate information regard-
19 ing the risks identified under paragraph (1) to the
20 media as well as directly to the public, both on an
21 ongoing basis and during a terrorist attack or other
22 incident.

23 “(f) REPORT ON HSARPA ACTIVITIES.—

24 “(1) IN GENERAL.—Consistent with the Fed-
25 eral Acquisition Regulation and any other relevant

1 Federal requirements, not later than 60 days after
2 the date of enactment of this subsection and annu-
3 ally thereafter, the Secretary shall submit a report
4 to the appropriate congressional committees con-
5 taining the research, development, testing, evalua-
6 tion, prototyping, and deployment activities under-
7 taken by the Homeland Security Advanced Research
8 Projects Agency during the previous fiscal year, in-
9 cluding funds expended for such activities in the pre-
10 vious fiscal year.

11 “(2) CONTENTS.—For each activity under-
12 taken, the report shall—

13 “(A) describe the corresponding risk anal-
14 ysis performed by the Department that sup-
15 ports the decision to undertake that activity;
16 and

17 “(B) describe the efforts made to transi-
18 tion that activity into a Federal, State, or local
19 acquisition program.

20 “(3) ADDITIONAL ACTIVITIES.—The Secretary
21 shall include in each report a description of each
22 proposal that was reviewed in the period covered by
23 the report by the Director of the Homeland Security
24 Advanced Research Projects Agency under section
25 313(d)(3), including a statement of whether the pro-

1 posal received a grant, cooperative agreement, or
2 contract from the Director.

3 **“SEC. 237. PROFESSIONAL DEVELOPMENT.**

4 “(a) REPORTING REQUIREMENT.—Sixty days before
5 establishing the mandatory workforce program as required
6 by section 236(c)(1), the Secretary shall report to the ap-
7 propriate congressional committees on the following:

8 “(1) A description of how homeland security
9 technological requirements are developed by the Di-
10 rectorate of Science and Technology’s customers
11 within the Department.

12 “(2) An assessment of whether Department em-
13 ployees receive adequate and appropriate job train-
14 ing to allow them to identify, express, and prioritize
15 homeland security capability gaps.

16 “(3) A plan for how the Directorate, in coordi-
17 nation with the Domestic Nuclear Detection Office
18 and other Department components, can enhance and
19 improve technology requirements development and
20 the technology acquisition process, to accelerate the
21 delivery of effective, suitable technologies that meet
22 performance requirements and appropriately address
23 an identified homeland security capability gap.

24 “(4) An assessment of whether Congress should
25 authorize, in addition to the program required under

1 section 236(c)(1), a training program for Depart-
2 ment employees to be trained in requirements writ-
3 ing and acquisition, that—

4 “(A) is prepared in consultation with the
5 Department of Veterans Affairs Acquisition
6 Academy and the Defense Acquisition Univer-
7 sity; and

8 “(B) if the Secretary determines that such
9 additional training should be authorized by
10 Congress, includes specification about—

11 “(i) the type, skill set, and job series
12 of Department employees who would ben-
13 efit from such training, including an esti-
14 mate of the number of such employees;

15 “(ii) a suggested curriculum for the
16 training;

17 “(iii) the type and skill set of edu-
18 cators who could most effectively teach
19 those skills;

20 “(iv) the length and duration of the
21 training;

22 “(v) the advantages and disadvan-
23 tages of training employees in a live class-
24 room, or virtual classroom, or both;

1 “(vi) cost estimates for the training;
2 and
3 “(vii) the role of the Directorate in
4 supporting the training.

5 “(b) USE OF RESEARCH AND DEVELOPMENT CEN-
6 TER.—The Secretary is encouraged to use a federally
7 funded research and development center to assist the Sec-
8 retary in carrying out the requirements of this section.

9 **“SEC. 238. TRACKING SYSTEMS, RESEARCH MILESTONES,
10 AND CUSTOMER FEEDBACK.**

11 “(a) IN GENERAL.—In establishing a system to col-
12 lect feedback under section 236(c)(2), the Secretary
13 shall—

14 “(1) establish a system to monitor and account
15 for homeland security research milestones; and

16 “(2) create a formal process for collecting feed-
17 back from customers on the effectiveness of the
18 technology or services delivered by Directorate of
19 Science and Technology.

20 “(b) SYSTEM.—The system established under sub-
21 section (a)(1) shall identify and account for research mile-
22 stones to monitor the progress of Directorate of Science
23 and Technology research, development, testing, and eval-
24 uation activities, and collect information from the Direc-

1 torate’s customers about their level of satisfaction with the
2 performance of the Directorate, including by—

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

6 “(2) collecting and evaluating customer feed-
7 back;

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

12 “(4) allowing the Secretary to report the num-
13 ber of products and services developed by the Direc-
14 torate that have been transitioned into acquisition
15 programs.

16 “(c) GUIDANCE.—The Under Secretary for Science
17 and Technology shall publicize and implement guidance
18 for homeland security researchers funded by the Direc-
19 torate on setting valid initial and subsequent research
20 milestones.

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

23 “(1) by not later than one year after the date
24 of enactment of this section identifying what actions

1 have been taken to carry out the requirements of
2 this section; and

3 “(2) annually thereafter describing—

4 “(A) research milestones for each large
5 project with a Federal cost share greater than
6 \$80,000,000 that has been successfully met and
7 missed, including for each missed milestone, an
8 explanation of why the milestone was missed;
9 and

10 “(B) customer feedback collected, includ-
11 ing an evaluation of the effectiveness of the
12 technology or services delivered by the Direc-
13 torate.”.

14 (b) CLERICAL AMENDMENTS.—The table of contents
15 in section 1(b) is amended in the items relating to subtitle
16 D of title II—

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

19 (2) in the item relating to section 231, by in-
20 sserting “of Science and Technology” after “Office”;
21 and

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

“Sec. 236. Research prioritization and requirements.

“Sec. 237. Professional development.

“Sec. 238. Tracking systems, research milestones, and customer feedback.”.

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

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

4 “(d) TEST, EVALUATION, AND STANDARDS DIVI-
5 SION.—

6 “(1) ESTABLISHMENT.—There is established in
7 the Directorate of Science and Technology a Test,
8 Evaluation, and Standards Division.

9 “(2) DIRECTOR.—The Test, Evaluation, and
10 Standards Division shall be headed by a Director of
11 Test, Evaluation, and Standards, who shall be ap-
12 pointed by the Secretary and report to the Under
13 Secretary for Science and Technology.

14 “(3) RESPONSIBILITIES, AUTHORITIES, AND
15 FUNCTIONS.—The Director of Test, Evaluation, and
16 Standards—

17 “(A) is the principal adviser to the Sec-
18 retary, the Under Secretary of Management,
19 and the Under Secretary for Science and Tech-
20 nology on all test and evaluation or standards
21 activities in the Department; and

22 “(B) shall—

23 “(i) prescribe test and evaluation poli-
24 cies for the Department;

25 “(ii) oversee and ensure that adequate
26 test and evaluation activities are planned

1 and conducted by or on behalf of compo-
2 nents of the Department in major acquisi-
3 tion programs of the Department, as des-
4 ignated by the Secretary, based on risk,
5 acquisition level, novelty, complexity, and
6 size of the acquisition program, or as oth-
7 erwise established in statute;

8 “(iii) review major acquisition pro-
9 gram test reports and test data to assess
10 the adequacy of test and evaluation activi-
11 ties conducted by or on behalf of compo-
12 nents of the Department; and

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

18 “(4) DEPUTY DIRECTOR OF OPERATIONAL TEST
19 AND EVALUATION.—Within the Division there shall
20 be a Deputy Director of Operational Test and Eval-
21 uation, who—

22 “(A) is the principal operational test and
23 evaluation official for the Department; and

24 “(B) shall—

1 “(i) monitor and review the oper-
2 ational testing and evaluation activities
3 conducted by or on behalf of components
4 of the Department in major acquisition
5 programs of the Department, as des-
6 ignated by the Secretary, based on risk,
7 acquisition level, novelty, complexity, and
8 size of the acquisition program, or as oth-
9 erwise established in statute;

10 “(ii) provide the Department with
11 independent and objective assessments of
12 the adequacy of testing and evaluation ac-
13 tivities conducted in support of major ac-
14 quisitions programs; and

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

21 “(5) STANDARDS EXECUTIVE.—Within this Di-
22 vision, there shall be a Standards Executive as de-
23 scribed in Office of Management and Budget Cir-
24 cular A-119. The Standards Executive shall—

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

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

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

10 **SEC. 203. PEER REVIEW.**

11 (a) RESPONSIBILITIES AND AUTHORITIES OF THE
12 UNDER SECRETARY.—Section 302 (6 U.S.C. 183) is
13 amended by striking “and” after the semicolon at the end
14 of paragraph (13), by striking the period at the end of
15 paragraph (14) and inserting “; and”, and by adding at
16 the end the following new paragraph:

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

20 “(A) consulting with experts, including sci-
21 entists and practitioners, about the research
22 and development conducted by the Directorate
23 of Science and Technology; and

24 “(B) performing ongoing independent, ex-
25 ternal, scientific peer review—

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

2 “(ii) when divisions conduct multiple
3 programs focused on significantly different
4 subjects, at the program level.”.

5 (b) REPORT.—The Secretary shall report to Congress
6 not later than 60 days after the completion of the first
7 review under section 302(15)(B) of the Homeland Secu-
8 rity Act of 2002, as amended by subsection (a) of this
9 section on—

10 (1) the findings of the review; and

11 (2) any future efforts to ensure that the De-
12 partment’s research projects are peer reviewed, as
13 appropriate.

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

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

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

18 “(a) ESTABLISHMENT OF OFFICE.—There is estab-
19 lished an Office of Public-Private Partnerships in the Di-
20 rectorate of Science and Technology.

21 “(b) DIRECTOR.—The Office shall be headed by a Di-
22 rector, who shall be appointed by the Secretary. The Di-
23 rector shall report to the Under Secretary for Science and
24 Technology.

1 “(c) RESPONSIBILITIES.—The Director, in coordina-
2 tion with the Private Sector Office of the Department,
3 shall—

4 “(1) provide guidance on how to pursue pro-
5 posals to develop or deploy homeland security tech-
6 nologies (including regarding Federal funding, regu-
7 lation, or acquisition), including to persons associ-
8 ated with small businesses (as that term is defined
9 in the Small Business Act (15 U.S.C. 631 et seq.));

10 “(2) coordinate with components of the Depart-
11 ment to issue announcements seeking unique and in-
12 novative homeland security technologies to address
13 homeland security capability gaps;

14 “(3) promote interaction between homeland se-
15 curity researchers and private sector companies in
16 order to accelerate transition research or a prototype
17 into a commercial product and streamline the han-
18 dling of intellectual property; and

19 “(4) conduct technology research assessment
20 and marketplace analysis for the purpose of identi-
21 fying, leveraging, and integrating best-of-breed tech-
22 nologies and capabilities from industry, academia,
23 and other Federal Government agencies, and dis-
24 seminate research and findings to Federal, State,
25 and local governments.

1 “(d) RAPID REVIEW DIVISION.—

2 “(1) ESTABLISHMENT.—There is established
3 the Rapid Review Division within the Office of Pub-
4 lic-Private Partnerships.

5 “(2) PURPOSE AND DUTIES.—

6 “(A) IN GENERAL.—The Division—

7 “(i) is responsible for maintaining a
8 capability to perform business and tech-
9 nical reviews to assist in screening unsolic-
10 ited homeland security technology pro-
11 posals submitted to the Secretary; and

12 “(ii) shall assess the feasibility, sci-
13 entific and technical merits, and estimated
14 cost of such proposals.

15 “(B) SPECIFIC DUTIES.—In carrying out
16 those duties, the Division shall—

17 “(i) maintain awareness of the techno-
18 logical requirements of the Directorate’s
19 customers;

20 “(ii) establish and publicize accessible,
21 streamlined procedures allowing a partici-
22 pant to have their technology assessed by
23 the Division;

24 “(iii) make knowledgeable assessments
25 of a participant’s technology after receiving

1 a business plan, a technology proposal, and
2 a list of corporate officers, directors, and
3 employees with technical knowledge of the
4 proposal, within 60 days after such a sub-
5 mission; and

6 “(iv) review proposals submitted by
7 components of the Department to the Divi-
8 sion, subject to subsection (e).

9 “(3) COORDINATION.—The Director shall sub-
10 mit for consideration promising homeland security
11 technology research, development, testing, and eval-
12 uation proposals, along with any business and tech-
13 nical reviews, to the Director of the Homeland Secu-
14 rity Advanced Research Projects Agency and appro-
15 priate Department components for consideration for
16 support.

17 “(e) LIMITATION ON CONSIDERATION OR EVALUA-
18 TION OF PROPOSALS.—The Office may not consider or
19 evaluate homeland security technology proposals sub-
20 mitted in response to a solicitation for offers for a pending
21 procurement or for a specific agency requirement.

22 “(f) SATELLITE OFFICES.—The Under Secretary,
23 acting through the Director, may establish up to 3 satellite
24 offices across the country to enhance the Department’s
25 outreach efforts. The Secretary shall notify the appro-

1 priate congressional committees in writing within 30 days
2 after establishing any satellite office.

3 “(g) PERSONNEL.—The Secretary shall establish
4 rules to prevent the Director or any other employee of the
5 Office from acting on matters where a conflict of interest
6 may exist.”.

7 (b) CLERICAL AMENDMENT.—The table of contents
8 in section 1(b) is amended by striking the item relating
9 to such section and inserting the following:

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

10 (c) AUTHORIZATION OF APPROPRIATIONS.—Of the
11 amount authorized by section 101, there is authorized to
12 be appropriated \$30,000,000 for the Office of Public-Pri-
13 vate Partnerships for each of fiscal years 2011 and 2012.

14 **TITLE III—REPORTS**

15 **SEC. 301. DIRECTORATE OF SCIENCE AND TECHNOLOGY**
16 **STRATEGIC PLAN.**

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

19 **“SEC. 318. STRATEGIC PLAN.**

20 “(a) REQUIREMENT FOR STRATEGIC PLAN.—Not
21 later than 1 year after the date of enactment of this sec-
22 tion and every other year thereafter, the Under Secretary
23 for Science and Technology shall prepare a strategic plan
24 for the activities of the Directorate.

1 “(b) CONTENTS.—The strategic plan required by
2 subsection (a) shall be prepared in accordance with appli-
3 cable Federal requirements, and shall include the following
4 matters:

5 “(1) The long-term strategic goals of the Direc-
6 torate.

7 “(2) Identification of the research programs of
8 the Directorate that support achievement of those
9 strategic goals.

10 “(3) The connection of the activities and pro-
11 grams of the Directorate to requirements or home-
12 land security capability gaps identified by customers
13 within the Department and outside of the Depart-
14 ment, including the first responder community.

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

17 “(5) A technology transition strategy for the
18 programs of the Directorate.

19 “(6) A description of the policies of the Direc-
20 torate on the management, organization, and per-
21 sonnel of the Directorate.

22 “(c) SUBMISSION OF PLAN TO CONGRESS.—The Sec-
23 retary shall submit to Congress any update to the stra-
24 tegic plan most recently prepared under subsection (a) at

1 the same time that the President submits to Congress the
2 budget for each even-numbered fiscal year.”.

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

“Sec. 318. Strategic plan.”.

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

7 Section 302 (6 U.S.C. 182) is amended by inserting
8 “(a) IN GENERAL.—” before the first sentence, and by
9 adding at the end the following new subsection:

10 “(b) REPORT ON TECHNOLOGY REQUIREMENTS.—

11 “(1) IN GENERAL.—Within 90 days after the
12 date of enactment of this subsection, and biannually
13 thereafter, the Under Secretary shall, for each
14 project having a Federal cost share greater than
15 \$80,000,000 that is conducted or funded by the Di-
16 rectorate of Science and Technology, provide to the
17 appropriate congressional committees a list of de-
18 tailed operational and technical requirements that
19 are associated with the project.

20 “(2) LARGE PROJECTS.—Within 90 days after
21 the date of enactment of this subsection, and bian-
22 nually thereafter, the Secretary shall, for each
23 project conducted or funded by a component of the
24 Department, other than the Directorate of Science
25 and Technology, having a life-cycle cost greater than

1 \$1,000,000,000, provide to the appropriate congres-
2 sional committees detailed operational and technical
3 requirements that are associated with the project.”.

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

5 (a) IN GENERAL.—Not later than 1 year after the
6 date of enactment of this Act, the Secretary shall submit
7 a report to the appropriate congressional committees—

8 (1) assessing the current role of the venture
9 capital community in funding advanced homeland se-
10 curity technologies, including technologies proposed
11 by small business concerns as defined under section
12 3 of the Small Business Act (15 U.S.C. 632); and

13 (2) providing recommendations about creating a
14 nonprofit organization for the purposes of delivering
15 advanced homeland security technologies to the
16 homeland security community to further its mis-
17 sions.

18 (b) CONTENTS.—The report shall include the fol-
19 lowing:

20 (1) An assessment of the current awareness
21 and insight that the Department has regarding ad-
22 vanced private sector homeland security innovation,
23 and the Department’s ability to quickly transition
24 innovative products into acquisitions.

1 (2) A description of how the Department cur-
2 rently finds and works with emerging companies,
3 particularly firms that have never done business
4 with the Federal Government, small business con-
5 cerns, small business concerns that are owned and
6 operated by women, small business concerns that are
7 owned and operated by veterans, and minority-
8 owned and operated small business concerns.

9 (3) An assessment and analysis of the current
10 role that venture capitalists play in the development
11 of homeland security technologies, including an as-
12 sessment of how the venture capital community
13 could be leveraged to accelerate technology, foster
14 development, and introduce new technologies needed
15 by the homeland security community.

16 (4) An assessment of whether the Department
17 could help nascent commercial technologies mature
18 into commercial-off-the-shelf products the homeland
19 security community could acquire.

20 (5) An analysis of whether the Central Intel-
21 ligence Agency's In-Q-Tel organization or the De-
22 partment of Defense's OnPoint Technologies organi-
23 zation could serve as a model for the development of
24 homeland security technology at the Department.

1 (6) Recommendations of the Secretary regard-
2 ing how Congress could authorize the establishment
3 of a private, independent, not-for-profit organization
4 to bridge the gap between the technology needs of
5 the homeland security community and new advances
6 in commercial technology, including specifics on po-
7 tential funding levels, activities for the organization,
8 including the provision of technical assistance, and
9 whether to establish set-asides for small businesses
10 that are minority-owned and operated or located in
11 socially and economically disadvantaged areas.

12 (c) USE OF RESEARCH AND DEVELOPMENT CEN-
13 TER.—The Secretary is encouraged to use a federally
14 funded research and development center to produce the
15 report under this section.

16 (d) AUTHORIZATION OF APPROPRIATIONS.—Of the
17 amount authorized by section 101, there is authorized
18 \$500,000 for the report.

19 **TITLE IV—DIRECTORATE OF**
20 **SCIENCE AND TECHNOLOGY**
21 **PROGRAMS**

22 **SEC. 401. LIMITATIONS ON RESEARCH.**

23 Section 302(4) (6 U.S.C. 182(4)) is amended by in-
24 serting after “extramural programs,” the following: “that,
25 to the greatest extent possible, addresses a prioritized risk

1 to the homeland as identified by a risk analysis under sec-
2 tion 226(e) of this Act”.

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

4 (a) AUTHORIZATION OF APPROPRIATIONS.—Of the
5 amount authorized by section 101, there is authorized to
6 be appropriated \$40,000,000 for fiscal year 2011 and
7 \$41,200,000 for fiscal year 2012 to the Secretary to carry
8 out the university-based centers program of the Depart-
9 ment.

10 (b) CRITERIA FOR DESIGNATION.—Section
11 308(b)(2)(B)(iii) of the Homeland Security Act of 2002
12 (6 U.S.C. 188(b)(2)(B)(iii)) is amended by inserting be-
13 fore the period at the end the following: “, including med-
14 ical readiness training and research, and community resil-
15 iency for public health and healthcare critical infrastruc-
16 ture”.

17 (c) EXPLOSIVE COUNTERMEASURES OR DETEC-
18 TION.—Section 308(b)(2)(B)(iv) of the Homeland Secu-
19 rity Act of 2002 (6 U.S.C. 188(b)(2)(B)(iv)) is amended
20 by striking “and nuclear” and inserting “nuclear, and ex-
21 plosive”.

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

23 (a) GAO STUDY OF UNIVERSITY-BASED CENTERS.—
24 Not later than 120 days after the date of enactment of
25 this Act, the Comptroller General of the United States

1 shall initiate a study to assess the university-based centers
2 for homeland security program authorized by section
3 308(b)(2) of the Homeland Security Act of 2002 (6
4 U.S.C. 188(b)(2)), and provide recommendations to the
5 appropriate congressional committees for appropriate im-
6 provements.

7 (b) SUBJECT MATTERS.—The study under sub-
8 section (a) shall include the following:

9 (1) A review of key areas of study needed to
10 support the homeland security mission, and criteria
11 that should be utilized to determine those key areas
12 for which the Department should maintain, estab-
13 lish, or eliminate university-based centers.

14 (2) A review of the method by which university-
15 based centers, federally funded research and develop-
16 ment centers, and Department of Energy national
17 laboratories receive tasking from the Department,
18 including a review of how university-based research
19 is identified, prioritized, and funded.

20 (3) A review of selection criteria for designating
21 university-based centers and a weighting of such cri-
22 teria.

23 (4) An examination of the optimal organization
24 and role of the university-based centers in sup-

1 reporting the mission of the Directorate and the De-
2 partment components.

3 (5) An identification of the most appropriate
4 review criteria and metrics to measure demonstrable
5 progress achieved by university-based centers in ful-
6 filling Department taskings, and mechanisms for de-
7 livering and disseminating the research results of
8 designated university-based centers within the De-
9 partment and to other Federal, State, and local
10 agencies.

11 (6) An examination of the means by which aca-
12 demic institutions that are not designated or associ-
13 ated with the designated university-based centers
14 can optimally contribute to the research mission of
15 the Directorate.

16 (7) An assessment of the interrelationship be-
17 tween the different university-based centers.

18 (8) A review of any other essential elements of
19 the programs determined in the conduct of the
20 study.

21 (c) MORATORIUM ON NEW UNIVERSITY-BASED CEN-
22 TERS.—The Secretary may not designate any new univer-
23 sity-based centers to research new areas in homeland secu-
24 rity prior to the completion of the Comptroller General's
25 review.

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

2 (a) IN GENERAL.—The Under Secretary shall sup-
3 port research, development, testing, evaluation, and tran-
4 sition of cybersecurity technology, including fundamental,
5 long-term research to improve the ability of the United
6 States to prevent, protect against, detect, respond to, and
7 recover from acts of terrorism and cyber attacks, with an
8 emphasis on research and development relevant to large-
9 scale, high-impact attacks.

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

12 (1) advance the development and accelerate the
13 deployment of more secure versions of fundamental
14 Internet protocols and architectures, including for
15 the domain name system and routing protocols;

16 (2) improve and create technologies for detect-
17 ing attacks or intrusions, including monitoring tech-
18 nologies;

19 (3) improve and create mitigation and recovery
20 methodologies, including techniques for containment
21 of attacks and development of resilient networks and
22 systems that degrade gracefully;

23 (4) develop and support infrastructure and tools
24 to support cybersecurity research and development
25 efforts, including modeling, testbeds, and data sets
26 for assessment of new cybersecurity technologies;

1 (5) assist the development and support of tech-
2 nologies to reduce vulnerabilities in process control
3 systems;

4 (6) develop and support cyber forensics and at-
5 tack attribution; and

6 (7) test, evaluate, and facilitate the transfer of
7 technologies associated with the engineering of less
8 vulnerable software and securing the information
9 technology software development lifecycle.

10 (c) COORDINATION.—In carrying out this section, the
11 Under Secretary shall coordinate activities with—

12 (1) the Under Secretary for National Protection
13 and Programs; and

14 (2) the heads of other relevant Federal depart-
15 ments and agencies, including the National Science
16 Foundation, the Defense Advanced Research
17 Projects Agency, the Information Assurance Direc-
18 torate of the National Security Agency, the National
19 Institute of Standards and Technology, the Depart-
20 ment of Commerce, and other appropriate working
21 groups established by the President to identify
22 unmet needs and cooperatively support activities, as
23 appropriate.

24 (d) AUTHORIZATION OF APPROPRIATIONS.—Of the
25 amount authorized by section 101, there is authorized to

1 be appropriated \$75,000,000 to the Department for each
2 of fiscal years 2011 and 2012 for the cybersecurity re-
3 search and development activities of the Directorate to
4 prevent, detect, and respond to acts of terrorism and other
5 large-scale disruptions to information infrastructure.

6 **SEC. 405. NATIONAL RESEARCH COUNCIL STUDY OF CY-**
7 **BERSECURITY INCENTIVES.**

8 (a) STUDY.—Not later than 90 days after the date
9 of enactment of this Act, the Under Secretary and the
10 Under Secretary for National Protection and Programs of
11 the Department shall seek to enter into an agreement with
12 the National Research Council of the National Academy
13 of Sciences to conduct a study to assess methods that
14 might be used to promote market mechanisms that further
15 cybersecurity and make recommendations for appropriate
16 improvements thereto.

17 (b) SUBJECT MATTERS.—The study required under
18 subsection (a) shall include the following:

19 (1) Liability that subjects software and system
20 vendors and system operators to potential damages
21 for system breaches.

22 (2) Mandated reporting of security breaches
23 that could threaten critical functions, including pro-
24 vision of electricity and resiliency of the financial
25 sector.

1 (3) Regulation that under threat of civil pen-
2 alty, imposes best practices on system operators of
3 critical infrastructure.

4 (4) Certification from standards bodies about
5 conformance to relevant cybersecurity standards that
6 can be used as a marketplace differentiation.

7 (5) Accounting practices that require companies
8 to report their cybersecurity practices and postures
9 and the results of independently conducted red team
10 simulated attacks or exercises.

11 (6) Cybersecurity risk insurance, including
12 analysis of the current marketplace and rec-
13 ommendations to promote cybersecurity insurance.

14 (c) SUBMISSION TO CONGRESS.—Not later than two
15 years after the date of enactment of this Act, the Sec-
16 retary shall submit to the appropriate congressional com-
17 mittees the results of the study required under subsection
18 (a), together with any recommendations of the Secretary
19 related thereto.

20 (d) AUTHORIZATION OF APPROPRIATIONS.—Of the
21 amount authorized by section 101, there is authorized to
22 be appropriated \$500,000 to the Department for fiscal
23 year 2011 to carry out this section.

1 **SEC. 406. RESEARCH ON CYBER COMPROMISE OF INFRA-**
2 **STRUCTURE.**

3 (a) IN GENERAL.—Pursuant to section 201 of the
4 Homeland Security Act of 2002 (6 U.S.C. 121) and in
5 furtherance of domestic preparedness for and collective re-
6 sponse to a cyber attack by a terrorist or other person,
7 the Secretary, working with the heads of other national
8 security and intelligence agencies, shall conduct research
9 and determine if the security of federally owned program-
10 mable electronic devices and communication networks, in-
11 cluding hardware, software, and data, essential to the reli-
12 able operation of critical electric infrastructure has been
13 compromised.

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

16 (1) The extent of any compromise.

17 (2) An identification of any attackers.

18 (3) The method of penetration.

19 (4) Ramifications of any such compromise on
20 future operations of critical electric infrastructure.

21 (5) Secondary ramifications of any such com-
22 promise on other critical infrastructure sectors and
23 the functioning of civil society.

24 (6) Ramifications of any such compromise on
25 national security, including war fighting capability.

26 (7) Recommended mitigation activities.

1 (c) REPORT.—Not later than 30 days after the date
2 a determination has been made under subsection (a), the
3 Secretary shall submit to the appropriate congressional
4 committees a report on the findings of such determination.
5 The report may contain a classified annex if the Secretary
6 determines it to be appropriate.

7 **SEC. 407. DUAL-USE TERRORIST RISKS FROM SYNTHETIC**
8 **GENOMICS.**

9 (a) SENSE OF CONGRESS.—It is the sense of Con-
10 gress that the field of synthetic genomics has the potential
11 to facilitate enormous gains in fundamental discovery and
12 biotechnological applications, but it also has inherent dual-
13 use homeland security risks that must be managed.

14 (b) REQUIREMENT.—The Under Secretary shall ex-
15 amine and report to the appropriate congressional com-
16 mittees by not later than one year after the date of enact-
17 ment of this Act on the homeland security implications
18 of the dual-use nature of synthetic genomics and, if the
19 Under Secretary determines that such research is appro-
20 priate, may conduct research in that area, including—

21 (1) determining the current capability of syn-
22 thetic nucleic acid providers to effectively differen-
23 tiate a legitimate customer from a potential terrorist
24 or other malicious actor;

1 (2) determining the current capability of syn-
2 thetic nucleic acid providers to effectively screen or-
3 ders for sequences of homeland security concern;
4 and

5 (3) making recommendations regarding screen-
6 ing software, protocols, and other remaining capa-
7 bility gaps uncovered by the study.

8 **SEC. 408. UNDERWATER TUNNEL SECURITY DEMONSTRA-**
9 **TION PROJECT.**

10 (a) **IN GENERAL.**—The Under Secretary, in consulta-
11 tion with the Assistant Secretary of the Transportation
12 Security Administration, shall conduct a demonstration
13 project to test and assess the feasibility and effectiveness
14 of certain technologies to enhance the security of under-
15 water public transportation tunnels against terrorist at-
16 tacks involving the use of improvised explosive devices.

17 (b) **INFLATABLE PLUGS.**—At least one of the tech-
18 nologies tested under subsection (a) shall be inflatable
19 plugs that may be rapidly deployed to prevent flooding of
20 an underwater public transportation tunnel.

21 (c) **REPORT.**—Not later than 180 days after the com-
22 pletion of the demonstration project under subsection (a),
23 the Under Secretary shall submit to the appropriate con-
24 gressional committees a report on the results of the dem-
25 onstration project.

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

2 (a) IN GENERAL.—The Under Secretary, in carrying
3 out responsibilities under section 302 of the Homeland Se-
4 curity Act of 2002 (6 U.S.C. 182), may support research,
5 development, testing, evaluation, and transition of tech-
6 nology that increases the Nation’s preparedness against
7 chemical and biological threats and strengthens the Na-
8 tion’s preparedness and collective response against those
9 threats through improved threat awareness and advanced
10 surveillance, detection, and protective countermeasures.

11 (b) BIOLOGICAL SECURITY.—To carry out subsection
12 (a), the Under Secretary may conduct research to develop
13 understanding, technologies, and systems needed to pro-
14 tect against biological attacks on the Nation’s population
15 or infrastructure, including—

16 (1) providing advanced planning tools, concepts
17 of operations (including alarm resolution protocols),
18 and training exercises for responding to and recov-
19 ering from biological attacks;

20 (2) developing biological assays and improved
21 detection technology that will operate with faster de-
22 tection times, lower costs, and the potential for in-
23 creased geographical coverage to the Nation when
24 compared to existing homeland security technologies;

25 (3) characterizing threats posed by biological
26 weapons, anticipating future threats, conducting

1 comprehensive threat and risk assessments to guide
2 prioritization of the Nation's biodefense investments,
3 and developing population threat assessments that
4 inform the issuance of material threat determina-
5 tions;

6 (4) conducting bioforensics research in support
7 of criminal investigations to aid attribution, appre-
8 hension, and prosecution of a terrorist or other per-
9 petrator of a biological attack, and providing tools
10 and facilities that Federal law enforcement inves-
11 tigators need to analyze biological threat evidence re-
12 covered, including operation of the National Bio-
13 forensic Analysis Center; and

14 (5) conducting appropriate research and studies
15 that will increase our understanding of and uncer-
16 tainties associated with risk and threats posed by bi-
17 ological agents through the Biological Threat Char-
18 acterization Center and other means as determined
19 by the Secretary.

20 (c) AGRICULTURAL SECURITY.—The Under Sec-
21 retary may conduct research and development to enhance
22 the protection of the Nation's agriculture and food system
23 against terrorist attacks, and other emergency events
24 through enhancement of current agricultural counter-
25 measures, development of new agricultural counter-

1 measures, and provision of safe, secure, state-of-the-art
2 biocontainment laboratories for researching foreign animal
3 and zoonotic diseases, including—

4 (1) developing technologies to defend the Na-
5 tion against the natural and intentional introduction
6 of selected foreign animal diseases, developing next-
7 generation vaccines and diagnostics in coordination
8 with the Department of Agriculture, and modeling
9 the spread of foreign animal diseases and their eco-
10 nomic impact to evaluate strategies for controlling
11 outbreaks; and

12 (2) leading the Department effort to enhance
13 interagency coordination of research and develop-
14 ment of agricultural disease countermeasures.

15 (d) CHEMICAL SECURITY.—The Under Secretary
16 may develop technology to reduce the Nation’s vulner-
17 ability to chemical warfare agents and commonly used
18 toxic industrial chemicals, including—

19 (1) developing a robust and enduring analytical
20 capability in support of chemical countermeasures
21 development, including developing and validating fo-
22 rensic methodologies and analytical tools, conducting
23 risk and vulnerability assessments based on chemical
24 threat properties, and maintaining infrastructure in-
25 cluding the Chemical Security Analysis Center;

1 (2) developing technology to detect a chemical
2 threat release; and

3 (3) developing technologies and guidance docu-
4 ments to foster a coordinated approach to returning
5 a chemically contaminated area to a normal condi-
6 tion, and to foster analysis of contaminated areas
7 both before and after the restoration process.

8 (e) RISK ASSESSMENTS.—

9 (1) IN GENERAL.—The Under Secretary shall
10 produce risk assessments for biological and chemical
11 threats, and shall coordinate with the Director of the
12 Domestic Nuclear Detection Office of the Depart-
13 ment, the Assistant Secretary of the Office of
14 Health Affairs of the Department, and the Assistant
15 Secretary of Infrastructure Protection of the De-
16 partment on an integrated risk assessment, includ-
17 ing regarding chemical, biological, radiological, nu-
18 clear, and explosive threats.

19 (2) USAGE.—The assessments required under
20 paragraph (1) shall be used to inform and guide the
21 threat assessments and determinations by the Sec-
22 retary of Homeland Security regarding agents and
23 toxins pursuant to section 302(9) of the Homeland
24 Security Act of 2002 (6 U.S.C. 182(9)), and to

1 guide prioritization of other homeland defense activi-
2 ties, as appropriate.

3 (3) **TASK FORCE.**—The Under Secretary for
4 Science and Technology shall convene an interagency
5 task force of relevant subject matter experts to as-
6 sess the proposed methodology to be used for each
7 assessment required under paragraph (1), and to
8 provide recommendations to the Under Secretary as
9 to the adequacy of such methodology.

10 **SEC. 410. MARITIME DOMAIN AWARENESS AND MARITIME**
11 **SECURITY TECHNOLOGY TEST, EVALUATION,**
12 **AND TRANSITION CAPABILITIES.**

13 (a) **GLOBAL MARITIME DOMAIN AWARENESS AND**
14 **MARITIME SECURITY TECHNOLOGY TEST, EVALUATION,**
15 **AND TRANSITION CAPABILITIES.**—

16 (1) **ESTABLISHMENT.**—The Secretary shall es-
17 tablish capabilities for conducting global maritime
18 domain awareness and maritime security technology
19 test, evaluation, and transition, as provided in this
20 subsection.

21 (2) **PURPOSE.**—The purpose of such capabili-
22 ties shall be to—

23 (A) direct technology test, evaluation, and
24 transition activities in furtherance of border
25 and maritime security; and

1 (B) evaluate such technology in diverse en-
2 vironments including coastal, seaport, and off-
3 shore locations.

4 (b) COORDINATION.—The Secretary, acting through
5 the Under Secretary, shall ensure that—

6 (1) technology test, evaluation, and transition
7 efforts funded by the Department in furtherance of
8 border and maritime security avoid duplication of ef-
9 forts, reduce unnecessary redundancies, streamline
10 processes, increase efficiencies, and otherwise com-
11 plement existing Department and other efforts in
12 border and maritime security; and

13 (2) the results of such efforts are shared with
14 the appropriate congressional committees and others
15 as determined appropriate by the Secretary.

16 **SEC. 411. RAPID BIOLOGICAL THREAT DETECTION AND**
17 **IDENTIFICATION.**

18 (a) IN GENERAL.—Notwithstanding section 302(4)
19 of the Homeland Security Act of 2002 (6 U.S.C. 182(4)),
20 the Secretary shall require the Under Secretary, in con-
21 sultation with other relevant operational components of
22 the Department, to assess whether the development of
23 screening capabilities for pandemic influenza and other in-
24 fectious diseases should be undertaken by the Directorate

1 to support entry and exit screening at ports of entry and
2 for other purposes.

3 (b) DEVELOPMENT OF METHODS.—If the Under
4 Secretary determines that the development of such screen-
5 ing capabilities should be undertaken, the Secretary shall,
6 to the extent possible, initiate development of safe and ef-
7 fective methods to rapidly screen incoming travelers at
8 ports of entry for pandemic influenza and other infectious
9 diseases.

10 (c) COLLABORATION.—In developing methods under
11 subsection (b), the Secretary may collaborate with other
12 Federal agencies, as appropriate.

13 **SEC. 412. EDUCATING THE PUBLIC ABOUT RADIOLOGICAL**
14 **THREATS.**

15 (a) PUBLIC AWARENESS CAMPAIGN.—The Secretary
16 shall develop a public awareness campaign to enhance pre-
17 paredness and collective response to a radiological attack,
18 including the following:

19 (1) A clear explanation of the dangers associ-
20 ated with radioactive materials.

21 (2) Possible effects of different levels of radi-
22 ation exposure, including a clear description of the
23 how radiation exposure occurs and the amount of ex-
24 posure necessary to be of concern.

1 (3) Actions that members of the public should
2 take regarding evacuation, personal decontamina-
3 tion, and medical treatment.

4 (b) RECOVERY.—The Secretary shall develop a plan
5 for postevent recovery from a radiological attack. Such
6 plan shall include the following:

7 (1) A definition of the demarcation between re-
8 sponse and recovery from a radiological attack.

9 (2) Consideration of multiple attack scenarios,
10 including a worst-case scenario.

11 (3) Consideration of multiple recovery strate-
12 gies, including decontamination, demolition and re-
13 moval, and relocation.

14 (4) Consideration of economic, health, and psy-
15 chological effects.

16 **SEC. 413. RURAL RESILIENCE INITIATIVE.**

17 (a) IN GENERAL.—The Under Secretary shall con-
18 duct research intended to assist State, local, and tribal
19 leaders and the private sector in developing the tools and
20 methods to enhance preparation for, and response and re-
21 silience to, terrorist events and other incidents.

22 (b) INCLUDED ACTIVITIES.—Activities under this
23 section may include—

24 (1) research and implementation through out-
25 reach activities with rural communities;

- 1 (2) an examination of how communities employ
2 resilience capabilities and response assets;
- 3 (3) a community resilience baseline template for
4 determining the resilience capacity of a rural com-
5 munity;
- 6 (4) a plan to address community needs for re-
7 silience;
- 8 (5) an education program for community lead-
9 ers and first responders about their resilience capac-
10 ity and mechanisms for mitigation, including via dis-
11 tance learning; and
- 12 (6) a mechanism by which this research can
13 serve as a model for adoption by communities across
14 the Nation.

15 **SEC. 414. SENSE OF CONGRESS REGARDING THE NEED FOR**
16 **INTEROPERABILITY STANDARDS FOR INTER-**
17 **NET PROTOCOL VIDEO SURVEILLANCE TECH-**
18 **NOLOGY.**

19 It is the sense of Congress that—

- 20 (1) video surveillance systems that operate over
21 the Internet are an emerging homeland security
22 technology that has the potential of significantly im-
23 proving homeland security forensic and analytical
24 capability;

1 (2) to realize the full security benefits of such
2 emerging homeland security technology, there should
3 be interoperability standards for such technology;

4 (3) the Directorate, working with other appro-
5 priate Federal agencies, should encourage the pri-
6 vate sector to develop interoperability standards for
7 such emerging homeland security technology; and

8 (4) such efforts will help the Federal Govern-
9 ment, which is one of the largest users of surveil-
10 lance technology, in detecting, deterring, preventing,
11 and responding to terrorist attacks.

12 **TITLE V—DOMESTIC NUCLEAR** 13 **DETECTION OFFICE**

14 **SEC. 501. AUTHORIZATION OF APPROPRIATIONS.**

15 There is authorized to be appropriated for the Do-
16 mestic Nuclear Detection Office of the Department—

17 (1) \$305,840,000 for fiscal year 2011; and

18 (2) \$315,005,000 for fiscal year 2012.

19 **SEC. 502. DOMESTIC NUCLEAR DETECTION OFFICE OVER-** 20 **SIGHT.**

21 (a) SENSE OF CONGRESS.—It is the sense of Con-
22 gress that the Directorate should conduct basic and inno-
23 vative research and nondevelopmental testing on behalf of
24 the Domestic Nuclear Detection Office (in this section re-

1 ferred to as “DNDO”), in order to advance next genera-
2 tion nuclear detection technologies.

3 (b) INTERNAL REVIEW OF PROJECT SELECTION AND
4 EVALUATION METHODOLOGY.—Not later than 90 days
5 after the date of enactment of this Act, the Director of
6 the DNDO shall begin an internal review of the method-
7 ology by which research, development, testing, and evalua-
8 tion is identified, prioritized, and funded by the DNDO.
9 In conducting such review, the Director shall consult with
10 the Under Secretary and the heads of all operational com-
11 ponents of the Department that own, operate, or maintain
12 nuclear or radiological detection technologies.

13 (c) CONTENTS OF REVIEW.—In carrying out the re-
14 view under subsection (b), the Director of the DNDO
15 shall—

16 (1) identify the process by which basic and ap-
17 plied research and operational testing that should be
18 conducted in concert and under agreement with the
19 Directorate;

20 (2) describe the roles, responsibilities, common
21 definitions, standard operating procedures, and deci-
22 sion process for research, development, testing, and
23 evaluation activities;

1 (3) describe and implement a transparent sys-
2 tem for tracking research, development, testing, and
3 evaluation requirements;

4 (4) describe and implement a mechanism to
5 provide regular updates to components of the De-
6 partment on the progress of such research;

7 (5) evaluate the degree to which needs of the
8 operational components of the Department and
9 State and local first responders are being adequately
10 addressed by the existing project selection process,
11 and if not, how such process can be improved;

12 (6) establish a method to collect and evaluate
13 Department component feedback;

14 (7) utilize departmental matrices and systems
15 to determine if technologies produced by the Direc-
16 torate have enhanced the ability of Department com-
17 ponents to perform their missions;

18 (8) identify appropriate five-year levels of in-
19 vestment in basic and applied research and develop-
20 ment, in particular among the Department labora-
21 tories, federally funded research and development
22 centers, university-based centers, Department of En-
23 ergy national laboratories, and other Federal labora-
24 tories;

1 (9) project balance of use of the entities re-
2 ferred to in paragraph (8) among the Directorate
3 and other Department components; and

4 (10) establish a formal merit review process,
5 with external peer review where appropriate.

6 (d) REPORT.—Not later than one year after the com-
7 pletion of the review required by subsection (b), the Direc-
8 tor of the DNDO shall submit to the Secretary and the
9 appropriate congressional committees a report containing
10 the findings of such review, together with information on
11 the systems, methods, and mechanisms established, and
12 recommendations for additional improvements.

13 (e) UPDATES ON IMPLEMENTATION.—One hundred
14 and twenty days after the date of enactment of this Act,
15 and annually thereafter, the Inspector General of the De-
16 partment shall submit to the appropriate congressional
17 committees an update on the status of implementation of
18 this section and activities in support of such implementa-
19 tion.

20 **SEC. 503. STRATEGIC PLAN AND FUNDING ALLOCATIONS**
21 **FOR GLOBAL NUCLEAR DETECTION ARCHI-**
22 **TECTURE.**

23 Not later than 180 days after the date of enactment
24 of this Act, the Secretary shall submit to the appropriate

1 congressional committees a report containing the fol-
2 lowing:

3 (1) A strategic plan for the global nuclear de-
4 tection architecture to deter and detect the transport
5 of nuclear or radioactive materials by all means pos-
6 sible, with specific focus on establishing the goals,
7 objectives, and cost projections for the next five
8 years, including a discussion of—

9 (A) technological and nontechnological
10 methods to increase detection capabilities;

11 (B) the preventive nature of the global nu-
12 clear detection architecture, including projected
13 impact on would-be terrorists;

14 (C) detection capability enhancements for
15 the various transportation modes, at ports of
16 entry and between ports of entry;

17 (D) balanced risk-based deployment of de-
18 tection assets across all border and other path-
19 ways; and

20 (E) any emerging threat vectors identified
21 by the Director of the Domestic Nuclear Detec-
22 tion Office.

23 (2) In consultation with the Secretary of De-
24 fense, the Secretary of Energy, the Secretary of
25 State, the Nuclear Regulatory Commission, the In-

1 intelligence Community, and the Attorney General, an
2 analysis of overall budget allocations that determines
3 whether Governmentwide nuclear detection resources
4 clearly align with identified priorities to maximize
5 results and minimize duplication of efforts.

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

7 (a) SENSE OF CONGRESS.—It is the sense of Con-
8 gress that in view of the Secretary’s decision not to certify
9 advanced spectroscopic portal monitors for primary
10 screening applications because they do not offer a signifi-
11 cant increase in operational effectiveness over existing
12 technology, the Director must attempt to identify viable
13 alternatives.

14 (b) ANALYSIS AND REPORT.—The Director of the
15 Domestic Nuclear Detection Office shall analyze and re-
16 port to the appropriate congressional committees by not
17 later than 90 days after the date of enactment of this Act
18 on both existing and developmental alternatives to existing
19 radiation portal monitors and advanced spectroscopic por-
20 tal monitors that would provide the Department with a
21 significant increase in operational effectiveness for pri-
22 mary screening for radioactive materials.

23 **SEC. 505. AUTHORIZATION OF SECURING THE CITIES INI-**
24 **TIATIVE.**

25 (a) FINDINGS.—Congress finds the following:

1 (1) The Securing the Cities Initiative of the De-
2 partment uses next generation radiation detection
3 technology to detect the transport of nuclear and ra-
4 diological material in urban areas by terrorists or
5 other unauthorized individuals.

6 (2) The technology used by partners in the Se-
7 curing the Cities Initiative leverages radiation detec-
8 tion technology used at ports of entry.

9 (3) The Securing the Cities Initiative has fos-
10 tered unprecedented collaboration and coordination
11 among its Federal, State, and local partners.

12 (4) The Securing the Cities Initiative is a crit-
13 ical national capability to detect the dangerous intro-
14 duction of nuclear and radiological material.

15 (b) AUTHORIZATION OF APPROPRIATIONS.—Of
16 amounts authorized by section 501, there is authorized to
17 be appropriated to the Director of the Domestic Nuclear
18 Detection Office of the Department for the Securing the
19 Cities Initiative such sums as may be necessary for each
20 of fiscal years 2011 and 2012, including—

21 (1) for each city in which it has been imple-
22 mented by fiscal year 2009—

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

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

1 (2) for additional Securing the Cities initiatives
2 to be implemented in not fewer than 2 sites partici-
3 pating in the Urban Area Security Initiative, such
4 sums as may be necessary each fiscal year to imple-
5 ment and sustain each additional initiative.

6 **TITLE VI—CLARIFYING**
7 **AMENDMENTS**

8 **SEC. 601. FEDERALLY FUNDED RESEARCH AND DEVELOP-**
9 **MENT CENTERS.**

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

11 (1) by inserting “(a) ESTABLISHMENT.—” be-
12 fore the first sentence; and

13 (2) by adding at the end the following new sub-
14 sections:

15 “(b) CONGRESSIONAL TASKING.—Upon a request of
16 the chairman and the ranking minority member of an ap-
17 propriate congressional committee, a federally funded re-
18 search and development center established under this sec-
19 tion may perform independent analysis of homeland secu-
20 rity issues and report its findings to the appropriate con-
21 gressional committees and the Secretary.

22 “(c) CONGRESSIONAL OVERSIGHT.—Federally fund-
23 ed research and development centers established under
24 this section are encouraged, upon request of the chairman
25 and the ranking minority member of an appropriate con-

1 gressional committee, to provide to the committee a copy
2 of any report it produces for the Department or any of
3 its components.

4 “(d) CONFLICTS OF INTEREST.—The Secretary shall
5 review and revise, as appropriate, the policies of the De-
6 partment relating to personnel conflicts of interest to en-
7 sure that such policies specifically address employees of
8 federally funded research and development centers estab-
9 lished under this section who are in a position to make
10 or materially influence research findings or agency deci-
11 sionmaking.

12 “(e) ANNUAL REPORTS.—Each federally funded re-
13 search and development center established under this sec-
14 tion shall transmit to the Secretary and appropriate con-
15 gressional committees an annual report on the activities
16 of the center.”.

17 **SEC. 602. ELIMINATION OF HOMELAND SECURITY INSTI-**
18 **TUTE.**

19 (a) REPEAL.—Section 312 (6 U.S.C. 192) is re-
20 pealed.

21 (b) CLERICAL AMENDMENT.—The table of contents
22 in section 1(b) is amended by striking the item relating
23 to such section.

1 **SEC. 603. GAO STUDY OF THE IMPLEMENTATION OF THE**
2 **STATUTORY RELATIONSHIP BETWEEN THE**
3 **DEPARTMENT AND THE DEPARTMENT OF EN-**
4 **ERGY NATIONAL LABORATORIES.**

5 (a) IN GENERAL.—Not later than 120 days after the
6 date of the enactment of this Act, the Comptroller General
7 of the United States shall—

8 (1) conduct a study to assess the implementa-
9 tion of the statutory relationship between the De-
10 partment and the Department of Energy national
11 laboratories, as established by section 309(a)(2) of
12 the Homeland Security Act of 2002 (6 U.S.C.
13 189(a)(2)); and

14 (2) submit recommendations to the appropriate
15 congressional committees for appropriate improve-
16 ments to such relationship.

17 (b) STUDY SUBJECTS.—The study shall include the
18 following:

19 (1) Review of how the Department and the De-
20 partment of Energy—

21 (A) communicate needs and capabilities;
22 and

23 (B) select projects to be performed by the
24 Department of Energy under such statutory re-
25 lationship.

1 (2) Review of contracting mechanisms that the
2 Department and the Department of Energy use to
3 initiate and track work under such statutory rela-
4 tionship.

5 (3) Review of the fraction of Department of
6 Energy work performed for the Department under
7 such statutory relationship, compared to other De-
8 partment of Energy work performed for the Depart-
9 ment on a “work for others” basis.

10 (4) Review of the cost savings to the Depart-
11 ment and the Department of Energy achieved
12 through use of such statutory relationship, compared
13 to other Department of Energy work performed for
14 the Department on a “work for others” basis.

15 **TITLE VII—COMMISSION ON THE**
16 **PROTECTION OF CRITICAL**
17 **ELECTRIC AND ELECTRONIC**
18 **INFRASTRUCTURES**

19 **SEC. 701. COMMISSION ON THE PROTECTION OF CRITICAL**
20 **ELECTRIC AND ELECTRONIC INFRASTRUC-**
21 **TURES.**

22 (a) ESTABLISHMENT.—There is established the Com-
23 mission on the Protection of Critical Electric and Elec-
24 tronic Infrastructures (in this section referred to as the
25 “Commission”).

1 (b) PURPOSES.—

2 (1) IN GENERAL.—The purposes of the Com-
3 mission are to—

4 (A) assess vulnerabilities of electric and
5 electronic infrastructures, including—

6 (i) all components of the United
7 States electric grid, including electricity
8 generation, transmission, distribution and
9 metering; and

10 (ii) all computerized control systems
11 used in all United States critical infra-
12 structure sectors;

13 (B) provide a clear and comprehensive
14 strategy and specific recommendations for pro-
15 tecting these critical electric and electronic in-
16 frastructures; and

17 (C) test, evaluate, and report on specific
18 mitigation protection and recovery devices or
19 methods.

20 (2) IN PARTICULAR.—The Commission shall
21 give particular attention to threats that can disrupt
22 or damage critical electric and electronic infrastruc-
23 tures, including—

24 (A) cyber attacks or unintentional cyber
25 disruption;

1 (B) electromagnetic phenomena such as
2 geomagnetically induced currents, intentional
3 electromagnetic interference, and electro-
4 magnetic pulses caused by nuclear weapons;
5 and

6 (C) other physical attack, act of nature, or
7 accident.

8 (e) COMPOSITION OF COMMISSION.—

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

11 (A) 1 member shall be appointed by the
12 Chairman of the House of Representatives
13 Committee on Homeland Security;

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

17 (C) 1 member shall be appointed by the
18 Chairman of the House of Representatives
19 Committee on Energy and Commerce;

20 (D) 1 member shall be appointed by the
21 ranking minority member of the House of Rep-
22 resentatives Committee on Energy and Com-
23 merce;

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

4 (F) 1 member shall be appointed by the
5 ranking minority member of the Senate Com-
6 mittee on Homeland Security and Govern-
7 mental Affairs;

8 (G) 1 member shall be appointed by the
9 Chairman of the Senate Committee on Energy
10 and Natural Resources;

11 (H) 1 member shall be appointed by the
12 ranking minority member of the Senate Com-
13 mittee on Energy and Natural Resources; and

14 (I) 1 member who shall serve as the Chair-
15 man of the Commission, and who shall be ap-
16 pointed by the Speaker of the House of Rep-
17 resentatives with the concurrence of the Presi-
18 dent Pro Tempore of the Senate.

19 (2) QUALIFICATIONS.—It is the sense of Con-
20 gress that individuals appointed to the Commission
21 should be United States citizens, with significant
22 depth of experience in electric and electronic infra-
23 structures, their function, and their protection, as
24 well as the threats to these infrastructures as identi-
25 fied in subsection (b)(2).

1 (3) DEADLINE FOR APPOINTMENT.—All mem-
2 bers of the Commission shall be appointed within 30
3 days after the date of enactment of this Act.

4 (4) INITIAL MEETING.—The Commission shall
5 meet and begin the operations of the Commission as
6 soon as practicable.

7 (5) QUORUM; VACANCIES.—After its initial
8 meeting, the Commission shall meet upon the call of
9 the Chairman or a majority of its members. Six
10 members of the Commission shall constitute a
11 quorum. Any vacancy in the Commission shall not
12 affect its powers, but shall be filled in the same
13 manner in which the original appointment was
14 made.

15 (d) RESPONSIBILITIES OF COMMISSION.—The Com-
16 mission shall address—

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

21 (2) the roles, missions, and structure of all rel-
22 evant Federal, State, and local government depart-
23 ments and agencies with responsibilities for ensuring
24 protection and reliability for electric and electronic
25 infrastructures;

1 (3) the roles, missions, and structure of all rel-
2 evant private sector entities with responsibilities for
3 ensuring protection and reliability for electric and
4 electronic infrastructures;

5 (4) inter-agency coordination between and
6 among the entities identified in paragraphs (2) and
7 (3); and

8 (5) recommendations for protections and recov-
9 ery devices and measures.

10 (e) POWERS OF COMMISSION.—

11 (1) HEARINGS AND EVIDENCE.—The Commis-
12 sion or, on the authority of the Commission, any
13 subcommittee or member thereof, may, for the pur-
14 pose of carrying out this section, hold such hearings
15 and sit and act at such times and places, take such
16 testimony, receive such evidence, and administer
17 such oaths as the Commission or such designated
18 subcommittee or designated member may determine
19 advisable.

20 (2) CONTRACTING.—The Commission may, to
21 such extent and in such amounts as are provided in
22 appropriations Acts, enter into contracts to enable
23 the Commission to discharge its duties under this
24 subtitle.

25 (3) STAFF OF COMMISSION.—

1 (A) APPOINTMENT AND COMPENSATION.—

2 The Chairman of the Commission, in accord-
3 ance with rules agreed upon by the Commis-
4 sion, may appoint and fix the compensation of
5 a staff director and such other personnel as
6 may be necessary to enable the Commission to
7 carry out its functions, without regard to the
8 provisions of title 5, United States Code, gov-
9 erning appointments in the competitive service,
10 and without regard to the provisions of chapter
11 51 and subchapter III of chapter 53 of such
12 title relating to classification and General
13 Schedule pay rates, except that no rate of pay
14 fixed under this subsection may exceed the
15 equivalent of that payable for a position at level
16 I of the Executive Schedule under section 5316
17 of title 5, United States Code.

18 (B) PERSONNEL AS FEDERAL EMPLOY-
19 EES.—

20 (i) IN GENERAL.—The executive di-
21 rector and any employees of the Commis-
22 sion shall be employees under section 2105
23 of title 5, United States Code, for purposes
24 of chapters 63, 81, 83, 84, 85, 87, 89, and
25 90 of that title.

1 (ii) MEMBERS OF COMMISSION.—Sub-
2 paragraph (A) shall not be construed to
3 apply to members of the Commission.

4 (C) DETAILEES.—Any Federal Govern-
5 ment employee may be detailed to the Commis-
6 sion without reimbursement from the Commis-
7 sion, and such detailee shall retain the rights,
8 status, and privileges of his or her regular em-
9 ployment without interruption.

10 (D) CONSULTANT SERVICES.—The Com-
11 mission may procure the services of experts and
12 consultants in accordance with section 3109 of
13 title 5, United States Code, but at rates not to
14 exceed the daily rate paid a person occupying a
15 position at level I of the Executive Schedule
16 under section 5315 of title 5, United States
17 Code.

18 (E) SECURITY CLEARANCES.—The Chair-
19 man shall place an emphasis on hiring and re-
20 taining employees, contractors, and detailees
21 with active security clearances. For employees
22 who do not have security clearances but are de-
23 termined by the Chairman to need them, the
24 Central Intelligence Agency, Department of En-
25 ergy, Department of Defense, and any other

1 relevant agency shall expedite the necessary
2 clearance processes.

3 (F) FORMER EMP COMMISSION STAFF AND
4 RESOURCES.—The Chairman may make use of
5 any existing and viable staff and resources pre-
6 viously employed by the Commission to Assess
7 the Threat to the United States from Electro-
8 magnetic Pulse Attack established by section
9 1401 of Public Law 106–398 (114 Stat.
10 1654A–345).

11 (4) INFORMATION FROM FEDERAL AGENCIES.—

12 (A) IN GENERAL.—The Commission may
13 secure directly from any executive department,
14 bureau, agency, board, commission, office, inde-
15 pendent establishment, or instrumentality of the
16 Government, information, suggestions, esti-
17 mates, and statistics for the purposes of this
18 section. Each department, bureau, agency,
19 board, commission, office, independent estab-
20 lishment, or instrumentality shall, to the extent
21 authorized by law, furnish such information,
22 suggestions, estimates, and statistics directly to
23 the Commission, upon request made by the
24 Chairman, the chairman of any subcommittee
25 created by a majority of the Commission, or

1 any member designated by a majority of the
2 Commission.

3 (B) RECEIPT, HANDLING, STORAGE, AND
4 DISSEMINATION.—Information shall only be re-
5 ceived, handled, stored, and disseminated by
6 members of the Commission and its staff con-
7 sistent with all applicable statutes, regulations,
8 and Executive orders.

9 (5) ASSISTANCE FROM FEDERAL AGENCIES.—

10 (A) GENERAL SERVICES ADMINISTRA-
11 TION.—The Administrator of General Services
12 shall provide to the Commission on a reimburs-
13 able basis and as necessary, administrative sup-
14 port and other services for the performance of
15 the Commission's functions.

16 (B) OTHER DEPARTMENTS AND AGEN-
17 CIES.—In addition to the assistance prescribed
18 in paragraph (1), departments and agencies of
19 the United States may provide to the Commis-
20 sion such services, funds, facilities, staff, and
21 other support services as they may determine
22 advisable and as may be authorized by law.

23 (6) GIFTS.—The Commission may accept, use,
24 and dispose of gifts or donations of services or prop-
25 erty.

1 (7) **POSTAL SERVICES.**—The Commission may
2 use the United States mails in the same manner and
3 under the same conditions as departments and agen-
4 cies of the United States.

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

7 (1) hold public hearings and meetings to the ex-
8 tent appropriate;

9 (2) release public versions of the report re-
10 quired under subsection (g); and

11 (3) conduct any public hearing in a manner
12 consistent with the protection of sensitive or classi-
13 fied information provided to or developed for or by
14 the Commission as required by any applicable stat-
15 ute, regulation, or Executive order.

16 (g) **REPORT.**—Not later than 180 days after the ap-
17 pointment of the Commission, and annually thereafter, the
18 Commission shall submit to the President and Congress
19 a report containing such findings, conclusions, and rec-
20 ommendations for protection and recovery measures for
21 electric and electronic infrastructures as have been agreed
22 to by a majority of Commission members.

23 (h) **FUNDING.**—Of the amounts authorized by section
24 101, there is authorized to be appropriated for the activi-
25 ties of the Commission under this section—

- 1 (1) \$4,000,000 for fiscal year 2011; and
- 2 (2) \$4,000,000 for fiscal year 2012.



**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MR. OLSON OF TEXAS**

At the end of title IV add the following new section:

1 **SEC. ____ . BIOLOGICAL THREAT AGENT ASSAY EQUIVA-**
2 **LENCY.**

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

5 **“SEC. 318. BIOLOGICAL THREAT AGENT ASSAY EQUIVA-**
6 **LENCY PROGRAM.**

7 “(a) IN GENERAL.—To facilitate equivalent biological
8 threat agent identification among federally operated bio-
9 monitoring programs, the Under Secretary, in consulta-
10 tion with the Director of the Centers for Disease Control
11 and Prevention, may implement an assay equivalency pro-
12 gram for biological threat assays.

13 “(b) FEATURES.—In order to establish assay per-
14 formance equivalency to support homeland security and
15 public health security decisions, the program may—

16 “(1) evaluate biological threat detection assays,
17 their protocols for use, and their associated response
18 algorithms for confirmation of biological threat

1 agents, taking performance measures and concepts
2 of operation into consideration; and

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

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

8 “(d) IMPLEMENTATION.—The Secretary shall—

9 “(1) require implementation of the standards
10 developed under subsection (b)(2) for all Depart-
11 ment biomonitoring programs; and

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

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

16 “(1) designed to detect the presence of a bio-
17 logical threat agent; and

18 “(2) of a type selected under criteria estab-
19 lished by the Secretary.”.

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

“Sec. 318. Biological threat agent assay equivalency program.”.



**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MR. OWENS OF NEW YORK**

Page 23, strike “and” after the semicolon at line 5,
strike the period at line 8 and insert “and”, and after
line 8 insert the following new clause:

1 (v) in reviewing proposals submitted
2 to the Secretary, shall give priority to any
3 proposal submitted by a small business
4 concern as defined under section 3 of the
5 Small Business Act (15 U.S.C. 632).



Amendment to the Amendment in the Nature of a Substitute to H.R. 4842
Offered by Mr. Souder of Indiana

Section 409 is amended with the following:

Page 40, line 10 – strike the “.” And insert “ , and to enhance the development of border security technology.”

And by adding the following new subsection:

(f) **BORDER SECURITY.** - The Under Secretary may develop technology, in coordination with the Commissioner of Customs and Border Protection, to gain effective control of the international land borders of the United States within five years after the date of enactment of this Act. In carrying out such development activities, the Under Secretary shall ensure coordination and integration between new technologies developed and those already utilized by Customs and Border Protection.

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MS. TITUS OF NEVADA**

Page 16, line 24, before the semicolon insert “, which shall include policies to ensure that operational testing is done at facilities that already have relevant and appropriate safety and material certifications to the extent such facilities are available”.



SUBSTITUTE FOR THE AMENDMENT OFFERED BY
MR. McCAUL TO H.R. 4842
OFFERED BY _____

At the end of title IV add the following new section:

1 **SEC. ____ . RESEARCH AND DEVELOPMENT PROJECTS.**

2 Section 831 of the Homeland Security Act of 2002
3 (6 U.S.C. 391) is amended—

4 (1) in subsection (a), by striking “2010,” and
5 inserting “2012,”;

6 (2) in subsection (a), by adding at the end the
7 following new paragraph:

8 “(3) PRIOR APPROVAL.—In any case in which
9 the Under Secretary for Science and Technology in-
10 tends to exercise other transaction authority, the
11 Under Secretary must receive prior approval from
12 the Secretary after submitting to the Secretary a
13 proposal that includes the rationale for why a grant
14 or contract issued in accordance with the Federal
15 Acquisition Regulation is not feasible or appropriate
16 and the amount to be expended for such project. In
17 such a case, the authority for evaluating the pro-
18 posal may not be delegated by the Secretary to any-

1 one other than the Under Secretary for Manage-
2 ment.”; and

3 (3) by redesignating subsection (e) as sub-
4 section (i), and by inserting after subsection (d) the
5 following new subsections:

6 “(e) ANNUAL REPORT ON EXERCISE OF OTHER
7 TRANSACTION AUTHORITY.—

8 “(1) IN GENERAL.—The Secretary shall submit
9 to the appropriate congressional committees an an-
10 nual report on the exercise of other transaction au-
11 thority under subsection (a).

12 “(2) CONTENT.—The report shall include the
13 following:

14 “(A) The subject areas in which research
15 projects were conducted using other transaction
16 authority.

17 “(B) The extent of cost-sharing for such
18 projects among Federal and non-Federal
19 sources.

20 “(C) The extent to which use of other
21 transaction authority has addressed a homeland
22 security capability gap identified by the Depart-
23 ment of Homeland Security.

24 “(D) The total amount of payments, if
25 any, that were received by the Federal Govern-

1 ment as a result of such exercise of other trans-
2 action authority during the period covered by
3 the report.

4 “(E) The rationale for using other trans-
5 action authority, including why grants or con-
6 tracts issued in accordance with the Federal
7 Acquisition Regulation were not feasible or ap-
8 propriate.

9 “(F) the amount expended for each such
10 project.

11 “(f) TRAINING.—The Secretary shall develop a train-
12 ing program for acquisitions staff in the use of other
13 transaction authority to help ensure the appropriate use
14 of such authority.

15 “(g) REVIEW AUTHORITY.—The exercise of other
16 transaction authority shall be subject to review by the
17 Comptroller General of the United States to ensure that
18 an agency is not attempting to avoid the requirements of
19 procurement statutes and regulations.

20 “(h) OTHER TRANSACTION AUTHORITY DEFINED.—
21 In this section the term ‘other transaction authority’
22 means authority under subsection (a).”.



**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MS. CLARKE OF NEW YORK**

At the end of title IV add the following new section:

1 **SEC. ____ . NATIONAL URBAN SECURITY TECHNOLOGY LAB-**
2 **ORATORY.**

3 (a) IN GENERAL.—The National Urban Security
4 Technology Laboratory (formerly the Environmental
5 Measurements Laboratory) is authorized within the Direc-
6 torate for fiscal years 2011 and 2012.

7 (b) RESPONSIBILITIES.—The Under Secretary shall
8 utilize the National Urban Security Technology Labora-
9 tory to test, evaluate, and analyze homeland security capa-
10 bilities and serve as a technical authority to first respond-
11 ers and State and local entities, including by—

12 (1) conducting test programs, pilots projects,
13 demonstrations, and other forms of evaluations of
14 homeland security technologies both in the field and
15 in the laboratory;

16 (2) applying knowledge of operational end-user
17 environments and support for operational integration
18 to technology development, including—

19 (A) training;

1 (B) exercises;

2 (C) equipment;

3 (D) tactics;

4 (E) techniques; and

5 (F) procedures;

6 (3) representing interests and requirements be-
7 tween technology developers and operational end-
8 users; and

9 (4) supporting development and use of home-
10 land security equipment and operational standards.



**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MR. CUELLAR OF TEXAS**

Page 13, line 19, strike the period and insert “including through randomized sampling, focus groups, and other methods as appropriate.”.

Page 13, strike “and” after the semicolon at line 15, strike the period at line 19 and insert “; and”, and after line 19 insert the following new paragraph:

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

Page 15, line 10, after “collected” insert “and the success of the Directorate in meeting the customer service performance measures and standards”.



**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MS. HARMAN OF CALIFORNIA**

At the end of title IV add the following section:

1 **SEC. ____ . ASSESSMENT, RESEARCH, TESTING, AND EVAL-**
2 **UATION OF TECHNOLOGIES TO MITIGATE**
3 **THE THREAT OF SMALL VESSEL ATTACK.**

4 The Under Secretary may—

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

10 (2) conduct research, testing, and evaluation of
11 new technologies that might be capable of tracking
12 small vessels.



**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MS. HARMAN OF CALIFORNIA**

At the end of title IV add the following new section:

1 **SEC. ____ . SENSE OF CONGRESS REGARDING CENTERS OF**
2 **EXCELLENCE.**

3 It is the sense of Congress that centers of excellence
4 have the potential—

5 (1) to be a very useful tool in developing defen-
6 sive countermeasures to secure critical infrastructure
7 and prevent terrorism; and

8 (2) to play a key role in the Department's ef-
9 forts to research and develop new technologies to se-
10 cure the homeland.



15

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MS. JACKSON LEE OF TEXAS**

Page 33, beginning at line 17, strike "including monitoring technologies" and insert "including real-time monitoring and real-time analytic technologies".

Page 33, line 20, insert "^{and policies for real-time} ~~real-time enactment of pol-~~
~~icy~~" after "techniques ~~for~~".

Page 33, line 21, insert a comma after "attacks".



Strike "for" and

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Page 37, strike line 17 and insert the following:

(2) An identification of any attackers, including any affiliations with terrorists, terrorist organizations, state entities and non-state entities.

--End—

**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MS. JACKSON LEE OF TEXAS**

Page 21, line 4, before “provide” insert “ initiate and engage in proactive outreach efforts to small business concerns owned and controlled by socially and economically disadvantaged individuals and small business concerns owned and controlled by women (as such terms are defined in section 8(d)(3) of the Small Business Act, and”.



**AMENDMENT TO THE AMENDMENT IN THE
NATURE OF A SUBSTITUTE TO H.R. 4842
OFFERED BY MS. KIRKPATRICK OF ARIZONA**

At the end of title IV add the following new section:

1 SEC. ____ . STUDY OF FEASIBILITY AND BENEFIT OF EX-
2 PANDING OR ESTABLISHING PROGRAM TO
3 CREATE A NEW CYBERSECURITY CAPACITY
4 BUILDING TRACK AT CERTAIN INSTITUTIONS
5 OF HIGHER EDUCATION.

6 (a) IN GENERAL.—Within 90 days of enactment, the
7 Secretary, in coordination with the National Science
8 Foundation, shall commission a study by a nonprofit re-
9 search institution to determine the feasibility and potential
10 benefit of expanding the Federal Cyber Service Scholar-
11 ship for Service Program, or establishing a parallel pro-
12 gram, as methods to create a new cybersecurity or infor-
13 mation assurance capacity building track at institutions
14 of higher education that are not currently designated as
15 a National Center of Academic Excellence in Information
16 Assurance Education or a National Center of Academic
17 Excellence in Research.

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

1 (1) The feasibility and potential benefit of al-
2 lowing the following types of institutions into the ex-
3 isting Federal Cyber Service program:

4 (A) Community colleges.

5 (B) Institutions offering an undergraduate
6 degree, graduate degree, or post-graduate de-
7 gree, but do not qualify under the existing pro-
8 gram.

9 (C) Institutions offering a certificate or in-
10 dustry-recognized credential.

11 (2) The feasibility and potential benefit of es-
12 tablishing a new program modeled after the Federal
13 Cyber Service program to build capacity at—

14 (A) community colleges;

15 (B) institutions offering an undergraduate
16 degree, graduate degree, or post-graduate de-
17 gree, but do not qualify under the existing pro-
18 gram; or

19 (C) institutions offering a certificate or in-
20 dustry-recognized credential.

21 (3) The projected extent to which an expansion
22 of the existing Federal Cyber Service program as de-
23 scribed in paragraph (1) would—

24 (A) expand the availability of qualified in-
25 dividuals to work in information assurance and

1 cybersecurity within the Department and other
2 Federal, State, local, and tribal agencies, and
3 the private sector;

4 (B) encourage institutions of higher edu-
5 cation to develop a new information assurance
6 or cybersecurity education undergraduate de-
7 gree programs, graduate degree programs, or
8 programs conferring a certificate or industry-
9 recognized credential;

10 (C) increase the number of students grad-
11 uating annually from existing information as-
12 surance or cybersecurity education under-
13 graduate degree programs, graduate degree
14 programs, or programs conferring a certificate
15 or industry-recognized credential; or

16 (D) improve existing information assur-
17 ance or cybersecurity education undergraduate
18 degree programs, graduate degree programs, or
19 programs conferring a certificate or industry-
20 recognized credential.

21 (4) The projected extent to which the establish-
22 ment of a new program modeled after the Federal
23 Cyber Service program as described in paragraph
24 (2) would—

1 (A) expand the availability of qualified in-
2 dividuals to work in information assurance and
3 cybersecurity within the Department and other
4 Federal, State, local, and tribal agencies, and
5 the private sector;

6 (B) encourage institutions of higher edu-
7 cation to develop a new information assurance
8 or cybersecurity education undergraduate de-
9 gree programs, graduate degree programs, or
10 programs conferring a certificate or industry-
11 recognized credential;

12 (C) increase the number of students grad-
13 uating annually from existing information as-
14 surance or cybersecurity education under-
15 graduate degree programs, graduate degree
16 programs, or programs conferring a certificate
17 or industry-recognized credential; or

18 (D) improve existing information assur-
19 ance or cybersecurity education undergraduate
20 degree programs, graduate degree programs, or
21 programs conferring a certificate or industry-
22 recognized credential.

23 (c) REPORT.—Not later than 30 days after receiving
24 the findings of the study, the Secretary shall transmit the

- 1 findings, together with any comments thereon by the Sec-
- 2 retary, to the appropriate congressional committees.



~~SUBSTITUTE FOR THE~~ **AMENDMENT OFFERED BY**
MR. McCAUL TO H.R. 4842
OFFERED BY _____

At the end of title IV add the following new section:

1 **SEC. ____ . RESEARCH AND DEVELOPMENT PROJECTS.**

2 Section 831 of the Homeland Security Act of 2002
3 (6 U.S.C. 391) is amended—

4 (1) in subsection (a), by striking “2010,” and
5 inserting “2012,”;

6 (2) in subsection (a), by adding at the end the
7 following new paragraph:

8 “(3) **PRIOR APPROVAL.**—In any case in which
9 the Under Secretary for Science and Technology in-
10 tends to exercise other transaction authority, the
11 Under Secretary must receive prior approval from
12 the Secretary after submitting to the Secretary a
13 proposal that includes the rationale for why a grant
14 or contract issued in accordance with the Federal
15 Acquisition Regulation is not feasible or appropriate
16 and the amount to be expended for such project. In
17 such a case, the authority for evaluating the pro-
18 posal may not be delegated by the Secretary to any-

1 one other than the Under Secretary for Manage-
2 ment.”; and

3 (3) by redesignating subsection (e) as sub-
4 section (i), and by inserting after subsection (d) the
5 following new subsections:

6 “(e) ANNUAL REPORT ON EXERCISE OF OTHER
7 TRANSACTION AUTHORITY.—

8 “(1) IN GENERAL.—The Secretary shall submit
9 to the appropriate congressional committees an an-
10 nual report on the exercise of other transaction au-
11 thority under subsection (a).

12 “(2) CONTENT.—The report shall include the
13 following:

14 “(A) The subject areas in which research
15 projects were conducted using other transaction
16 authority.

17 “(B) The extent of cost-sharing for such
18 projects among Federal and non-Federal
19 sources.

20 “(C) The extent to which use of other
21 transaction authority has addressed a homeland
22 security capability gap identified by the Depart-
23 ment of Homeland Security.

24 “(D) The total amount of payments, if
25 any, that were received by the Federal Govern-

1 ment as a result of such exercise of other trans-
2 action authority during the period covered by
3 the report.

4 “(E) The rationale for using other trans-
5 action authority, including why grants or con-
6 tracts issued in accordance with the Federal
7 Acquisition Regulation were not feasible or ap-
8 propriate.

9 “(F) the amount expended for each such
10 project.

11 “(f) TRAINING.—The Secretary shall develop a train-
12 ing program for acquisitions staff in the use of other
13 transaction authority to help ensure the appropriate use
14 of such authority.

15 “(g) REVIEW AUTHORITY.—The exercise of other
16 transaction authority shall be subject to review by the
17 Comptroller General of the United States to ensure that
18 an agency is not attempting to avoid the requirements of
19 procurement statutes and regulations.

20 “(h) OTHER TRANSACTION AUTHORITY DEFINED.—
21 In this section the term ‘other transaction authority’
22 means authority under subsection (a).”.



AMENDMENT TO THE AMENDMENT IN THE

NATURE OF A SUBSTITUTE TO H.R. 4842

OFFERED BY MR. McCAUL OF TEXAS

In Section 404 "CYBERSECURITY RESEARCH AND DEVELOPMENT", insert the new subsection (d) and renumber the remaining paragraphs accordingly.

(d) AUTHORIZATION OF CYBERSECURITY PREPAREDNESS CONSORTIUM AND TRAINING CENTER.

(1) CYBERSECURITY PREPAREDNESS CONSORTIUM. — Subtitle C of title II of the Homeland Security Act of 2002 (6 U.S.C. 121 et seq.) is amended by adding at the end the following new section:

"SEC. 226. CYBERSECURITY PREPAREDNESS CONSORTIUM.

"(a) IN GENERAL. — To assist the Secretary in carrying out the requirements of section 404(a) of the Homeland Security Science and Technology Authorization Act of 2010, the Secretary may establish a consortium to be known as the 'Cybersecurity Preparedness Consortium'.

"(b) FUNCTIONS.—The Consortium shall—

- "(1). provide training to State and local first responders and officials specifically for preparing and responding to cybersecurity attacks;
- "(2). develop and update a curriculum and training model for State and local first responders and officials;
- "(3). provide technical assistance services to build and sustain capabilities in support of cybersecurity preparedness and response;
- "(4). conduct cybersecurity training and simulation exercises to defend from and respond to cyber attacks; and
- "(5). coordinate all cybersecurity preparedness training activities conducted by the Department.

"(c) MEMBERS.—The Consortium shall consist of academic, nonprofit and government partners that —

- "(1). have demonstrated expertise in developing and delivering cybersecurity training in support of homeland security;
- "(2). have demonstrated ability to utilize existing courses and expertise developed by the Department;

"(3). have demonstrated ability to coordinate with the National Domestic Preparedness Consortium and other training programs within the Department".

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

“Sec. 226. Cybersecurity Domestic Preparedness Consortium”.

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

“SEC. 227. CYBERSECURITY TRAINING CENTER. The Secretary may establish where appropriate a Cybersecurity Training Center to provide training courses and other resources for State and local first responders and officials to improve preparedness and response capabilities.”.

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

“Sec. 227. Cybersecurity Training Center.”.

AMENDMENT TO THE AMENDMENT IN THE NATURE OF A SUBSTITUTE TO
H.R. 4842
OFFERED BY MR. McCaul of Texas

At the end of title II, section 202, insert the following new section:

(7) EVALUATION OF DEPARTMENT OF DEFENSE TECHNOLOGIES- The Director of Test, Evaluation, and Standards is authorized to evaluate technologies currently in use or being developed by the Department of Defense to assess whether they can be leveraged to address homeland security capability gaps.