



# DHS S&T Component Liaison Program

*June 5, 2015*  
Fiscal Year 2015 Report to Congress



Homeland  
Security

*Science and Technology Directorate*

# Message from the Under Secretary for Science and Technology

I am pleased to submit the following report, "DHS S&T Component Liaison Program," which has been prepared by the Science and Technology Directorate.

This report was prepared pursuant to language in the Joint Explanatory Statement and Senate Report 113-198 accompanying the *Fiscal Year 2015 Department of Homeland Security Appropriations Act* (P.L. 114-4).

Pursuant to congressional requirements, this report is being provided to the following Members of Congress:



The Honorable John R. Carter  
Chairman, House Appropriations Subcommittee on Homeland Security

The Honorable Lucille Roybal-Allard  
Ranking Member, House Appropriations Subcommittee on Homeland Security

The Honorable John Hoeven  
Chairman, Senate Appropriations Subcommittee on Homeland Security

The Honorable Jeanne Shaheen  
Ranking Member, Senate Appropriations Subcommittee on Homeland Security

Inquiries related to this report may be directed to me at (202) 254-6033 or to the Department's Chief Financial Officer, Chip Fulghum, at (202) 447-5751.

Sincerely,

A handwritten signature in black ink, appearing to read "R.B." followed by a stylized surname.

Dr. Reginald Brothers  
Under Secretary for Science and Technology  
Department of Homeland Security



## DHS S&T Component Liaison Program

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# I. Legislative Language

This report was prepared pursuant to language in the Joint Explanatory Statement and Senate Report 113-198 accompanying the *Fiscal Year (FY) 2015 Department of Homeland Security (DHS) Appropriations Act* (P.L. 114-4).

The Joint Explanatory Statement states in relevant part:

## Component Liaison Program

Not later than 60 days after the date of enactment of this Act, S&T shall submit a plan to the Committees on the proposed structure of a liaison program that establishes a permanent mechanism for interaction between S&T and the components.

Senate Report 113-198 states in relevant part:

## COMPONENT LIAISONS

S&T is encouraged to increase opportunities for its staff to gain first-hand understanding of DHS operations through the establishment of a liaison program that embeds technical subject matter experts in the field with the operational elements of Components. S&T should also explore the utility of having detailees from the field-elements of the Components come into S&T to enrich the requirements generation process. Within 60 days after the date of enactment of this act, S&T shall submit a plan to this Committee that outlines how the liaison program will be structured.

## II. Background

This report details the DHS Science and Technology Directorate (S&T) Partnering for Innovation and Operational Needs through Embedding for Effective Relationships (PIONEER) program.

In April 2014, Secretary Johnson outlined his plan to foster departmental Unity of Effort through strengthening, creating, and reorienting business processes and functions within the Department. As part of the initiative, the Secretary spoke of finding new ways to address departmental challenges transparently and collaboratively in ways that would “provide a vital link between our strategic guidance and investments.”

In the spirit of the Secretary’s Unity of Effort initiative, on November 4, 2014, the Under Secretary for S&T launched the PIONEER program. PIONEER, as designed and outlined in the S&T Strategic Plan, will help S&T to identify and prioritize operational requirements and capability gaps through direct, on-the-ground collaboration and partnership with Components. Through PIONEER exchanges, S&T program staff will gain firsthand experience of Components’ operational environments and grow their personal networks of operational end users. Concurrently, in addition to gaining insight into and influence over S&T’s priorities, engagement by the Components will give them a better sense of state-of-the-art technology and how operations can be improved through collaboration with S&T.

PIONEER aligns to the Secretary’s vision for joint duty within the Department and represents a major step toward an established cross-departmental R&D culture. S&T’s investment in richer awareness and understanding of operational needs through PIONEER will also allow more effective identification of crosscutting requirements, better prioritization of projects, and more strategic investment in force-multiplying solutions.

### **III. Program Structure**

Three pillars of the PIONEER program are:

1. The S&T Embed program, which inserts S&T program staff into the Components using short- and long-term details;
2. The Special Advisor program, which brings senior-level managers and operators from operational Components into S&T for extended periods of time; and
3. The Exchange Officer program, which rotates junior-level operators from the operational Components through the S&T environment on an accelerated basis.

#### **S&T Embed Program**

The first PIONEER element will embed select S&T staff within Components' operational entities at both strategic and tactical layers. The program will target requests from Components, requirements arising from an S&T program or project, or areas ripe for possible application of an individual S&T detailee's expertise. As designed, the S&T Embed program has two types of deployment: short-term embeds and long-term (liaison) embeds. Long-term liaison roles are designed to insert at a higher-level strategic layer with a principal mission (1) to raise awareness of S&T efforts in support of a Component's mission, and (2) to ensure that S&T resources are most effectively invested in that Component's priorities. Short-term embeds are deployed to a more tactical, field-level site to gain firsthand knowledge of a Component's capabilities and to deepen the relationship between S&T and end users.

The S&T Embed program will facilitate better understanding of Components' real-world constraints and capture operational needs and capability gaps. This knowledge will enable S&T to fine-tune existing technologies, adapt projects in development, and drive new starts in addition to broadening information sharing to feed strategic investments in high-impact, priority areas.

#### **Special Advisor Program**

S&T already has a history of formal engagement with operational Components through long-term agreements bringing operational subject matter experts on, to support S&T programs. These agreements bring S&T program managers on-site expertise from experienced operators and end users. S&T is seeking to incorporate and expand this type of interaction in the PIONEER program under the umbrella of the Special Advisor program.

The envisioned Special Advisor program will bring in long-term details comprising senior-level managers and operators representing each Component. The Special Advisor

program's primary objective is to advise S&T leadership on Component mission capability gaps and strategic forecasting. Advisors will be selected on the basis of their knowledge of and experience in their respective Components and will provide reach-back capability to help integrate S&T's R&D and technology mission. Special Advisors will become conduits between their Components and S&T capable of resolving specific questions or issues affecting both entities.

## Exchange Officer Program

The third and final element of PIONEER is the Exchange Officer program, which aims to immerse outstanding mid-career operators and government civilians from Components in a 3-month, on-site detail to S&T. Similar to the Special Advisor program, this program will provide Components insight into cutting-edge technologies and development of future technologies and will allow redefinition of existing S&T projects. By differing from the Special Advisor program and focusing on mid-career staff, however, the Exchange Officer Program will help S&T to instill future Component leaders with baseline knowledge of and appreciation for technology as well as awareness of S&T's capabilities. Whereas other elements of PIONEER drive S&T's immediate and medium-term alignment with Components, the Exchange Officer Program provides S&T an opportunity to create enduring relationships within the Components and ensures long-term alignment.

S&T will develop performance metrics for the PIONEER program by September 30, 2015. Immediate success for S&T will be establishing and executing broad embed opportunities across the Transportation Security Administration (TSA), Federal Emergency Management Agency (FEMA), U.S. Customs and Border Protection (CBP), and United States Coast Guard (USCG). S&T seeks to fill at least one embed opportunity with each of these organizations within the pilot phase.

## IV. Program Plan and Progress to Date

Within 6 months as a pilot program, PIONEER demonstrated its value and was specifically included within S&T's Strategic Plan 2015–2019. The program is developing a model for formal data capture, data review, management, dissemination, and traceability as well as a plan for integration with the R&D systems development lifecycle.

The following is a vision for implementation from FY 2015 through steady-state final:

### Year One (FY 2015)

- Established PIONEER program framework and actively engaged select Components for embed opportunities. S&T plans to continue the program at current strength as a pilot, with emphasis on creation of relationships and execution of the S&T Embed portion of the program.
- The first senior-level (SES) long-term embed is at the FEMA Administrator's office. Requested by FEMA Administrator Fugate, this liaison role between S&T and FEMA will enable better coordination, cooperation, and understanding between the agencies at the highest levels.
- The first short-term embed placed an S&T program manager on a 10-day North Atlantic fisheries patrol aboard USCG Cutter Legare.
- The second short-term embed is a joint exercise with USCG and CBP with elements of Louisiana state and local law enforcement conducting scenario-based training on oil rigs in the Gulf of Mexico. We anticipate several additional embeds before the end of FY 2015.
- CBP, TSA, U.S. Immigration and Customs Enforcement (ICE), USCG and the Federal Law Enforcement Training Center (FLETC) have voiced similar interest in senior-level, long-term liaison roles to assist with integrated strategic planning and to allow S&T visibility and participation in their respective Component portfolio review processes. The PIONEER Project Management Office (PMO) is coordinating communication between the Component senior leadership and S&T to fill these long-term liaison roles. Discussions are in progress to ensure mutually beneficial outcomes to both parties.
- The following Component elements have expressed an interest in participating in PIONEER, with a focus on providing embed opportunities to S&T staff. The PIONEER PMO is working with Component points of contact to establish new and reoccurring embed opportunities:
  - TSA Office of Security Capabilities, Arlington, Virginia
  - CBP headquarters, Washington, D.C.
  - CBP Border Patrol Academy-Artesia, Artesia, New Mexico

- CBP Office of Border Patrol, Washington, D.C.
- USCG LANTArea Command, Portsmouth, Virginia
- USCG Research and Development Center, St. Elizabeths Facility
- USCG Training Command, St. Elizabeths Facility, Washington, D.C.
- USCG PACArea Command, Alameda, California
- ICE Technical Operations, Lorton, Virginia
- FLETC-Glynco, Glynco, Georgia

## Year Two (FY 2016)

S&T's proposal for FY 2016 is to solidify the Special Advisor program and the Exchange Officer program with a select number of Components based on availability of funding. S&T also will seek to increase the utilization and frequency of the S&T Embed program to a steady-state, fully operational level.

## Year Three (FY 2017)

S&T will seek to integrate the remaining operational Components into both the Special Advisor program and the Exchange Officer program to bring the program to full strength, steady-state operation. S&T will maintain robust, steady-state operations with Components.

## V. Conclusion

S&T's PIONEER program represents an opportunity for both S&T and the Department to take a step forward. Increased and richer interaction between S&T and operational Components at the strategic, tactical, senior, and junior levels promotes Unity of Effort within the Department. Numerous beneficial outcomes for this Unity of Effort include a more effective framework for initiating new R&D projects, better operational context for existing programs, better ability to recognize crosscutting capabilities and gaps within the Department, more effective scientific and technical assistance to Components, and creation of a common language for interaction between operational and R&D elements of the Department. Ultimately, this means S&T will be delivering better solutions and at the same time Components will be more open to acquisition and integration of new capabilities and technical solutions. PIONEER elements have already begun as pilots and have seen initial success. S&T looks forward to refining and expanding the effort with Components in subsequent phases of implementation.