



DHS Chemical, Biological, Radiological and Nuclear Functions Review Report

June 19, 2015

Fiscal Year 2015 Report to Congress



Homeland
Security

Message from the Deputy Secretary

The “DHS Chemical, Biological, Radiological, and Nuclear Functions Review Report” is submitted pursuant to the Senate Explanatory Statement accompanying the *Fiscal Year 2013 Department of Homeland Security Appropriations Act* (P.L. 113-6), which directed the Department to conduct a review of the organization, operations and communications of its Chemical, Biological, Radiological and Nuclear programs and provide a report of the review results.

The Department is recommending a path forward. In coordination with our Congressional oversight committees, we recommend reorganizing many of the Department of Homeland Security (DHS) Headquarters Chemical, Biological, Radiological, Nuclear, and Explosives functions, consistent with strengthening our Departmental Unity of Effort, by establishing a consolidated DHS Headquarters office to provide a more focused center of gravity supporting our DHS Operating Components and coordinating with our external partners in this important mission space. The reorganization will primarily consist of the merging of the DHS Domestic Nuclear Detection Office (DNDO) with the DHS Office of Health Affairs/Chief Medical Officer (OHA/CMO). In addition, small offices and functions from DHS Office of Policy, DHS Office of Operations Coordination, and the DHS Science and Technology Directorate will also join DNDO and OHA/CMO in the consolidated headquarters office. We are also taking advantage of our recent review of the DHS National Protection and Programs Directorate (NPPD) and recommend moving NPPD’s Office of Bombing Prevention and addressing explosives threats in the new consolidated headquarters office. We recognize that legislative changes will be required to make this reorganization. We will work with Congress to develop appropriate implementation to achieve our mutual objective: strengthening the operating effectiveness of the Department.

Pursuant to Congressional requirements, this report is provided to the following Members:

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

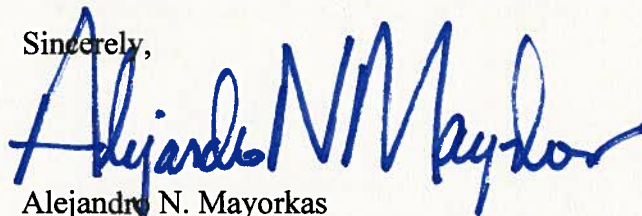
The Honorable Lucille Roybal-Allard
Ranking Member, House Appropriations Subcommittee on Homeland Security

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

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

If you have any questions, please do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads "Alejandro N. Mayorkas". The signature is fluid and cursive, with the first name being the most prominent.

Alejandro N. Mayorkas



DHS Chemical, Biological, Radiological and Nuclear Functions Review Report

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I. Legislative Language

This report is submitted pursuant to language in Joint Explanatory Statement and House Report 112-492, which accompanies the *Fiscal Year 2013 Department of Homeland Security Appropriation Act* (P.L. 113-6).

Joint Explanatory Statement states:

Language in the House report regarding the need to elevate and streamline the Department's focus on efforts to address chemical, biological, radiological and nuclear threats and deter and counter weapons of mass destruction (WMD) is agreed to. In particular, the Department of Homeland Security (DHS) should ensure clear assignment of responsibilities and unrestricted lines of communication both within the Department and in DHS engagement with the interagency and intergovernmental community. In working towards this, DHS should eliminate duplication of efforts within and between Departmental components, both in terms of administrative resources and organization. The Department is therefore directed to undertake an in-depth review of its organization, operations, and communications in carrying out its WMD programs, to include an evaluation of potential improvements in performance and possible savings in costs that might be gained by consolidation of current organizations and missions, including the option of merging functions of the Domestic Nuclear Detection Office (DNDO) and the Office of Health Affairs (OHA). While evaluating this option, consideration should be given to realigning certain functions outside of the new office, as detailed in the House report. The review should encompass all current and authorized DHS program activity for WMD defense; examine options for improvements on a holistic, department-wide basis, for carrying out these functions and operations; and include specific recommendations, to include statutory, organizational, administrative and funding changes. The Secretary is directed to submit the results of this review not later than September 1, 2013. Submission of this review is in lieu of the direction contained in the House report to develop a consolidation plan to merge DNDO and OHA into an Office of Weapons of Mass Destruction Defense for Fiscal Year 2014.

II. Background

As directed by the Senate Explanatory Statement accompanying the *Fiscal Year 2013 Department of Homeland Security Appropriations Act*, this report discusses the Department's review of its chemical, biological, radiological and nuclear (CBRN) programs and functions. The review included CBRN programs across DHS Headquarters (HQ), including the Office of Health Affairs (OHA), the Domestic Nuclear Detection Office (DNDO), the Science and Technology Directorate (S&T) and DHS Offices of Policy (PLCY) and Operations Coordination (OPS).

III. CBRN Functions Review

A. Review Approach

Pursuant to the direction in the Senate Explanatory Statement, the Office of the Secretary directed PLCY to lead a review team in conducting an impartial, collaborative assessment of potential CBRN functions alignment options. The review team identified realignment criteria and desired outcomes for the review, conducted independent analysis, and consulted with DNDO, OHA, S&T, leadership of other DHS Components, the Office of Management and Budget (OMB) and the National Security Council Staff.

The review team identified the following six DHS CBRN outcomes:

- Understand and Anticipate CBRN Threats (*See generally* Homeland Security Act of 2002, SAFE Port Act of 2006, Nuclear Forensics and Attribution Act of 2010; HSPD-4, -9, -10, -14, -18, -21, and -22; PPD-2 and -21; QHSR Report (2010));
- Characterize and Communicate CBRN Risk (*See generally* Homeland Security Act of 2002, SAFE Port Act of 2006; HSPD-9, -10, -14, -18, -21, and -22; PPD-2 and -21; QHSR Report (2010));
- Detect and Interdict, Where Possible, CBRN Threat Materials in Transit (Unreleased) (*See generally* Homeland Security Act of 2002, SAFE Port Act of 2006; HSPD-9, -10, and -14; PPD-2, -8, and -21; QHSR Report (2010));
- Detect the Release or Use of CBRN in Time to Respond (*See generally* Homeland Security Act of 2002; HSPD-9, -10, -14, -18, -21, and -22; PPD-2, -8, and 21; QHSR Report (2010));
- Effect Protective Measures for, Respond to, and Recover from the Release or Use of CBRN (*See generally* Homeland Security Act of 2002; HSPD-4, -5, -9, -10, -18, -20, and -22; PPD-2, -8, and -21; QHSR Report (2010)); and
- Coordinate and Manage Domestic CBRN Incidents (*See generally* Homeland Security Act of 2002; HSPD-5).

The review team also identified eight near-term (within two years) goals DHS could achieve with optimal alignment of its CBRN-related functions:

- Enhance the ability of DHS Operational Components to carry out their CBRN-related responsibilities;
- Enable DHS to formulate and communicate consistent Departmental positions on CBRN issues;
- Give DHS the ability to effectively structure, oversee, and execute major CBRN-related acquisitions;
- Provide appropriate CBRN focus and visibility within DHS;
- Enable robustness, agility and adaptability in the face of an evolving CBRN threat;
- Define clear roles and responsibilities for DHS HQ and Operational Components for responsiveness and accountability;
- Preserve programs and activities that are currently working; and
- Ensure cost neutrality or produce cost efficiencies.

B. CBRN Functions Alignment Options

The review team analyzed organizational models ranging from informal coordination to mission integration and identified five CBRN functions alignment options spanning this range:

1. No Change;
2. CBRN Coordinator (modeled on the current Counterterrorism Coordinator and Counterterrorism Advisory Board);
3. CBRN Coordination Office (modeled on the PLCY/Screening Coordination Office);
4. CBRN Mission Support Organization (consolidating or centrally managing most or all CBRN mission support activities such as CBRN-related policy, strategic planning, risk assessment, training and exercise support, situational awareness and forensics, research and development, laboratory relationships, and acquisitions, but not including operational functions currently conducted by DHS Operational Components); and
5. CBRN Operational Component (consolidating operational functions and mission support activities into a new Operational Component).

C. Evaluation of Alignment Options

The review team ruled out option 1 (No Change) because the current organizational structure was deemed by review participants to be not sufficiently robust to enhance DHS's ability to achieve either the DHS CBRN outcomes or the goals, going forward. The review team also ruled out option 5 (CBRN Operational Component) because review participants believed it to be too disruptive of current DHS operations and not sufficiently certain to meet the identified DHS CBRN near-term alignment goals.

The review team identified benefits and drawbacks for each of the remaining options (CBRN Coordinator, CBRN Coordination Office, and CBRN Mission Support Organization). There was general consensus among review participants that a more consolidated alignment, as described by the CBRN mission support option, would be the most likely to achieve the identified criteria and desired outcomes. There was discussion that the DHS Chief Medical Officer functions may not be included in the new office. However, the review participants were unable to reach

consensus on the final placement of a CBRN mission support office within the DHS organizational structure or the placement of the Chief Medical Officer (CMO) functions. The review participants also disagreed on which DHS CBRN research and development (R&D) functions should be included in the new office.¹ The results of the review, including the recommendation to establish a CBRN mission support organization, were presented to Secretary Napolitano in August 2013. No decision was implemented at that time due to the limited remaining duration of Secretary Napolitano's tenure.

D. Strengthening Department Unity of Effort

On April 22, 2014, Secretary Johnson directed the "Strengthening Departmental Unity of Effort Initiative" to improve the planning, programming, budgeting, and execution processes and the DHS joint operational planning and joint operations through strengthened Departmental structures, increased capability, and smart DHS HQ realignment. As part of the initiative, the Department established a new DHS Joint Requirements Council and strengthened the existing DHS budget and acquisition processes. In addition, the Department indicated, in briefings to select DHS appropriations and authorizing committee staffs, the Secretary's intent to realign PLCY and OPS based on their core functions and consolidate certain DHS HQ external affairs functions, all to focus DHS HQ offices on the principal objectives of the Unity of Effort initiative: better understanding of the broad and complex DHS mission space and empowering DHS Components to effectively execute their operations.

The Unity of Effort initiative was central to the Secretary's thinking in directing the Department re-visit the 2013 Review recommendations, further reinforcing the following near-term realignment goals, consistent with the tenets of Unity of Effort, from the initial review:

- Define clear roles and responsibilities for DHS HQ and operational components for responsiveness and accountability;
- Provide appropriate CBRN focus and visibility within DHS;
- Enable DHS to formulate and communicate consistent Departmental positions on CBRN issues;
- Provide DHS the ability to effectively structure, oversee, and execute major CBRN-related acquisitions; and
- Enhance the ability of DHS operational components to carry out their CBRN-related responsibilities, including through workforce health protection.

IV. Recommended CBRNE Reorganization

Based on the initial 2013 review, further informed by the Secretary's Unity of Effort initiative and the Department's recent review of NPPD, the Department recommends the following structure for DHS HQ chemical, biological, radiological, nuclear, and explosives (CBRNE)

¹ Multiple CBRN mission support office alternatives were identified and forwarded for consideration: (1) Secretary direct report CBRN office with all CBRN R&D; (2) Secretary direct report CBRN office with RN R&D included, but CB R&D remaining within the S&T; (3) Secretary direct report CBRN office with all CBRN R&D conducted by S&T; and (4) consolidated CBRN office, including DNDO, OHA, and all CBRN R&D created within S&T.

functions. Under the recommended structure, DHS would: (1) create a strong center of gravity for CBRNE functions within the DHS HQ, fostering greater synergies on priority CBRNE issues and greater awareness by external and internal organizations of the DHS HQ focal point for most CBRNE issues and (2) strengthen CBRNE-related operational activities in DHS's Operating Components. Additional benefits of this reorganization will likely also be realized as the Department's changes to its planning, programming, budgeting and execution system, joint operational planning, and joint operations mature over time.

A. Consolidated CBRNE Office

Based on the Department's review, the recommended structure would consolidate CBRNE functions in a DHS CBRNE Office, led at the Assistant Secretary level, as a direct report to the Secretary. The new office would be primarily comprised of the consolidation of DNDO and OHA, including the BioWatch Program. One option considered during the 2013 review was to transfer the CMO functions to the DHS Management Directorate. However, the recent Ebola cases and further discussions of future DHS pandemics crisis management led to the recognized need for this health and medical expertise to remain in a structure that would allow for easy and direct access to DHS and Component leadership. Further, it became increasingly apparent that emerging diseases like H1N1 influenza and Middle East Respiratory Syndrome are a frequent and recurring threat to the entire Nation, including the DHS workforce. Every national security incident has a health impact with lives at risk. This inextricable link between health and effective CBRNE response led to the proposal to keep the CMO with other CBRNE functions within the new CBRNE Office.

In so doing, the Director of DNDO and the CMO, as well as other relevant supervisory positions depending on the final organizational construct, would report to the Assistant Secretary for the CBRNE Office (A/S CBRNE) on chemical, biological, radiological, nuclear, explosives, and workforce health issues within their cognizance. The Assistant Secretary position would be empowered to coalesce and elevate CBRNE issues to the Secretary on behalf of the DHS Operating Components and represent DHS in the interagency on these matters, consistent with relevant statutory authorities and Presidential directives. Although no longer formal Secretary direct reports after the reorganization, the Director of DNDO and the CMO would have necessary access to the Secretary and Deputy Secretary, as representatives in DHS Senior Leader Forums, when their leadership and technical expertise on CBRNE or other workforce health issues was needed. The current Assistant Secretary billet within the OHA would be repurposed as the A/S CBRNE.

The A/S CBRNE would coordinate and maintain Department-wide CBRNE-related strategy, policy, situational awareness, periodic threat and risk assessments, contingency planning, operational requirements, acquisition formulation and oversight, and preparedness across all elements of Presidential Policy Directive 8, "National Preparedness" (2011)(prevention, protection, mitigation, response and recovery), consistent with relevant statutory authorities and Presidential directives. Specialty CBRNE personnel from PLCY and OPS, would permanently transfer, along with the DHS policy and operations support functions they perform, to further support the strengthened CBRNE center of gravity of the new office. In addition, Chemical/Biological (C/B) Risk Assessment functional responsibilities from S&T and NPPD's Office of Bombing Prevention would be permanently transferred to the new CBRNE Office.

The A/S CBRNE would be the Department-wide representative at appropriate internal, interagency, and international venues related to most DHS CBRNE strategy, policy, planning, programming, budgeting, investment, and joint operational plan and joint operational matters.

V. Effects of Reorganization

A. Chemical/Biological Issues Impact

For chemical threats, DHS fields small, disparate programs to address specific elements of chemical defense, detection, security, and risk analysis. But these programs would benefit from a coordinated approach to make use of limited resources currently applied to this threat. In biosurveillance, DHS fields a national program for detecting and addressing aerosol threats, but it does not address those threats in other venues like agriculture, water, or emerging infectious diseases. Additionally, emerging diseases like H1N1 influenza and Middle East Respiratory Syndrome are a frequent and recurring threat to the DHS workforce and the Nation. DHS requires a more robust analytical capability to anticipate impacts globally and at home across all threats and venues. DHS biosurveillance efforts should expand beyond their limited footprint and encompass the span of biothreats and mediums in which they may emerge. The new CBRNE Office will expand beyond the historic OHA purview to encompass the broader impacts of chemical and biological threats, rather than only looking at consequences from a health perspective.

B. Radiological/Nuclear Issues Impact

DNDO was chartered, in law and presidential directive, using an interagency construct to coordinate efforts across the U.S. Government (USG) for nuclear detection and to coordinate USG-wide efforts to detect and protect against nuclear threats. Similarly, the National Technical Nuclear Forensics Center was established within DNDO to provide centralized stewardship, planning, assessment, exercises, improvement, and integration for all federal technical nuclear forensics activities. The Nuclear Regulatory Commission, Department of Energy, Department of Defense, Federal Bureau of Investigation, and DHS operational components detail staff to DNDO to ensure priorities of their home agencies are accounted for and their activities are integrated in all aspects (architecture, risk analysis, R&D, acquisition, training, exercises, etc.) to improve coordination across the USG. These functions will continue as part of the new CBRNE Office.

DNDO currently has a robust program for detection of radiological and nuclear materials, but radiological and nuclear detection is just one aspect of the capabilities that DHS needs to comprehensively address this threat. The new CBRNE Office offers an opportunity to more robustly address the entire span of such an incident, to include prevention, protection, response, mitigation or recovery, consistent with relevant statutory authorities and Presidential directives. This will be accomplished in two ways: (1) inclusion of CBRNE policy and operational support personnel incorporated within the new CBRNE Office, and (2) establishing strong linkages between the new CBRNE Office and the new DHS Joint Requirements and Joint Operational Plans Processes.

C. Departmental Health Issues Impact

OHA and the CMO currently provide expert medical and health expertise to the Secretary and Component heads on much more than just CBRN-related issues. OHA ensures that medical quality standards are maintained across the Department, provides guidance to and coordinates with state and local first responders on health security issues, keeps the DHS workforce healthy and prepared to respond, serves as the DHS primary point of contact with other federal agencies on medical and public health issues, and provides expertise in veterinary medicine and food security.

OHA currently addresses all incidents, whether a major hurricane or a disease outbreak, from an integrated perspective, leveraging both technical threat-based expertise and workforce health capabilities. OHA ensures that front line responders within DHS and across the Nation are able to carry out their mission critical functions and that health concerns are integrated into national response to all threats, including those related to CBRN. In addition, OHA fields a number of highly sought subject matter experts that currently crosswalk the expertise in chemical exposures and newly emerging infectious diseases from medical to operational in a manner that is efficiently leveraging personnel. OHA's other functions unrelated to CBRN will continue to be carried out through the CBRNE office under the direction of the CMO.

Under the current structure, OHA's experts advise and support DHS leadership, its workforce, and public and medical health officials nationwide to prepare for, respond to, and recover from threats to Nation's health security. This role would continue in the new CBRNE Office, but the CMO would be able to add the capability to leverage its highly-skilled experts to further the Department's end-to-end planning for CBRNE threats. By having the Department's health expertise within the new CBRNE Office, existing health and medical expertise will be leveraged to build connections between current and emerging health and medical issues and contribute to CBRNE decision analysis. Further, OHA's current mission of medical advice and support, workforce health protection, first responder coordination, medical quality management, and interagency coordination on health/medical issues will be further enhanced through the centralization of all CBRNE functions, as the medical expertise will be better informed of CBRNE-related policy decisions, planning, and programs that may impact the Department's—and Nation's—medical needs.

D. S&T Issues Impact

To further consolidate CBRNE functions in the new office, the C/B risk assessment and material threat functions currently performed in S&T would transfer to the new CBRNE Office. This would allow greater synergies between risk determination and strategy and policy development, enhancing cohesion between these functions. However, due to the current synergies between C/B R&D and the facilities at which the work is conducted, C/B R&D performed in S&T would not transfer to the new CBRNE Office. Given this and the explosives threat work done in S&T, robust coordination between S&T and the new CBRNE Office would be required to ensure greater traceability from Secretary strategic guidance to operational results, a principal tenet of Departmental Unity of Effort.

E. Legislative Impact

- (1) The Department looks forward to working with Congress on legislation required to support the recommended CBRNE structure.

F. Consolidated Billet/Budget Structure

This table reflects the current budgets that would be consolidated. Additional analysis is required to determine if budgetary efficiencies can be gained by this consolidated structure.

Originating Office		FTE	FY16 PB Total Funding
DNDO		137	\$357.3M
OHA		96	\$124.1M
PLCY	CBRN Policy	4	\$1.0M
OPS	Ops Coordination CBRN Branch	7	\$1.2M
S&T	C/B Risk Assessment	4	\$9.9M
NPPD	Office of Bombing Prevention	19	\$14.2M
Consolidated CBRNE Office		267	\$507.7M

VI. Conclusion

The recommended reorganization described in this report creates greater Unity of Effort across the Department and enables DHS to meet its CBRNE responsibilities and intended reorganization outcomes and near-term goals.