

**WEAPONS OF MASS DESTRUCTION: BOLSTERING
DHS TO COMBAT PERSISTENT THREATS TO
AMERICA**

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON CYBERSECURITY,
INFRASTRUCTURE PROTECTION,
AND SECURITY TECHNOLOGIES

AND THE

SUBCOMMITTEE ON EMERGENCY
PREPAREDNESS, RESPONSE,
AND COMMUNICATIONS

OF THE

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WEAPONS OF MASS DESTRUCTION: BOLSTERING DHS TO COMBAT PERSISTENT THREATS TO AMERICA

Tuesday, July 14, 2015

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOMELAND SECURITY,
SUBCOMMITTEE ON CYBERSECURITY,
INFRASTRUCTURE PROTECTION, AND SECURITY
TECHNOLOGIES, AND
SUBCOMMITTEE ON EMERGENCY PREPAREDNESS,
RESPONSE, AND COMMUNICATIONS,
WASHINGTON, DC.

The subcommittees met, pursuant to call, at 2:09 p.m., in Room 311, Cannon House Office Building, Hon. John Ratcliffe [Chairman of the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies] presiding.

Present from Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies: Representatives Ratcliffe, Perry, Donovan, Richmond, Jackson Lee, and Langevin.

Present from Subcommittee on Emergency Preparedness, Response, and Communications: McSally, Walker, Loudermilk, Payne, Watson Coleman, and Rice.

Mr. RATCLIFFE. The Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies and the Subcommittee on Emergency Preparedness, Response, and Communications will come to order.

Both subcommittees are meeting jointly to consider the Department of Homeland Security's proposal to reorganize its chemical, biological, radiological, nuclear, and explosive activities into a consolidated CBRNE office.

During the Cold War years, the threat of nuclear annihilation was universally recognized. Today, there is an equally terrifying but persistent WMD threat. But the forms that such weapons could take and the bad actors seeking to obtain them have vastly expanded. Today's threat comes from Iran's pursuit of a nuclear weapon, as well as the rise of ISIS and other terrorist organizations that are seeking to acquire chemicals, biological agents, radiological or nuclear material to use it to set off a bomb in one of our major cities.

While such an attack may not result in total annihilation, it would be a major public health and safety catastrophe, as well as an economic and psychological blow to the entire country.

Today's threat is illustrated by several evolving situations unfolding across the globe. The current nuclear deal just announced

today with Iran, if approved, could increase the amount of nuclear material throughout the volatile Middle East if Iran is in fact allowed to retain a certain amount of enriched uranium.

Separately, Russia has recently announced it's pulling out of a decades-old Reagan administration INF Treaty which limited the number of nuclear weapons between the two countries. Russia has since moved to modernize and increase its stockpile, thereby making the availability of nuclear and radiological material that much greater.

Simultaneously, Middle Eastern countries, like Saudi Arabia, are building 16 new nuclear plants even as they struggle to battle radical Islamists within their own borders.

While these are greater geopolitical issues, the implications of the WMD threat to the U.S. homeland are immense. Since the collapse of the Soviet Union, Russia has struggled to keep tabs on its radiological and nuclear material across Eastern Europe. The current nuclear negotiations with Iran and the proliferation of nuclear material across the Middle East raises similar concerns of operational control of these sensitive materials.

This is all happening at a time when ISIS is propagating a call for terrorist plots here in the United States and is taking control of large pieces of territory across Iraq, Syria, and North Africa. Terrorists and militant groups have long had an interest in using a WMD to attack U.S. interests, especially those including chemical, biological, radiological, or nuclear materials. ISIS has made its ambition known that it wishes to obtain WMD material and use it in an attack.

Underscoring the very real possibility of this threat, Australian intelligence officials have publicly stated their belief that ISIS has already seized enough material from government facilities, hospitals, and universities in Iraq and Syria to build a dirty bomb.

Currently, the Department of Homeland Security is organized to address the WMD threat through several different offices and directorates: The Office of Health Affairs, or OHA, the Domestic Nuclear Detection Office, DNDO, and elements of the Science and Technology, or S&T, Directorate.

This fragmentation is in contrast to other departments and Federal agencies across the U.S. Government that have centralized WMD defense programs and have clear focal points for interagency collaboration. One of the major concerns we've heard with the current structure is that DHS doesn't have the stature and voice that it should among all of the agencies that are working to address these threats.

In September 2013, DHS was directed by Congress to undertake an in-depth review of its WMD programs. The review also required recommendations to improve its organizational structure to be more effective. Unfortunately, the committee only received this report less than a month prior to this hearing, meaning that it's nearly 2 years late.

I've had the opportunity to sit down with Dr. Gowadia, the director of DNDO, numerous times during my short tenure as Chairman and as part of my oversight responsibilities to learn how DNDO operates and works with its stakeholders, both domestically and internationally. One thing that I have concluded and have heard

repeatedly from others is that the current DNDO model works, something which, unfortunately, can't be said right now about every DHS office.

In support of the opinion that DNDO is one of the most effective offices within the Department, the most recent 2014 edition of "The Best Places to Work in the Federal Government" ranked DNDO 11th out of 314 agency subcomponents. This success is built on leadership, a clear mission, and a well-functioning organizational structure. While DNDO hasn't always been a benchmark of success, the organization has certainly matured, and it's matured into a model that I think should be replicated throughout the Department.

Now, Chairman McSally and I have convened our subcommittees here today to examine whether the DHS proposal to reorganize will support the shared opinion of most that the Department of Homeland Security should be doing more to guard against WMD threats. While the proposal to Congress lays out several different options and a proposed recommendation for how the Department would reorganize, we hope to hear more today about this proposed reorganization and how it will address gaps and strengthen the Department's posture towards WMD threats, and we, frankly, hope to hear some specifics.

I want to thank Chairman McSally for joining me in this effort, and I thank the witnesses for being here today.

[The statement of Chairman Ratcliffe follows:]

STATEMENT OF CHAIRMAN JOHN RATCLIFFE

JULY 14, 2015

During the Cold War years, the threat of nuclear annihilation was universally recognized. Today, there is an equally terrifying and persistent WMD threat, but the forms such weapons could take and the bad actors seeking to obtain them have vastly expanded. Today's threat comes from Iran's pursuit of a nuclear weapon, as well as the rise of ISIS and other terrorist organizations that are seeking to acquire chemicals, biological agents, radiological, or nuclear material to use it to set off a weapon in one of our major cities. While such an attack may not result in total annihilation, it would be a major public health and safety catastrophe, as well as an economic and psychological blow to the entire country.

Today's threat is illustrated by several evolving situations unfolding across the globe. The current nuclear deal being negotiated with Iran could increase the amount of nuclear material throughout the volatile Middle East if Iran is allowed to retain a certain amount of enriched uranium. Separately, Russia has recently announced it is pulling out of a decades-old Reagan Administration INF treaty, which limited the number of nuclear weapons between the two countries. Russia has since moved to modernize and increase its stockpile, thereby making the availability of nuclear and radiological material that much greater. Simultaneously, Middle Eastern countries like Saudi Arabia are building 16 new nuclear plants even as they struggle to battle radical Islamists within their own borders.

While these are greater geopolitical issues, the implications for the WMD threat to the U.S. homeland are immense. Since the collapse of the Soviet Union, Russia has struggled to keep tabs on its radiological and nuclear material across Eastern Europe. The current nuclear negotiations deal with Iran and the proliferation of nuclear material across the Middle East raises similar concerns of operational control of these sensitive materials.

This is all happening at a time when ISIS is propagating a call for terrorist plots in the United States and taking control of large pieces of territory across Iraq, Syria, and North Africa. Terrorists and militant groups have long had an interest in using a WMD to attack U.S. interests, especially those including chemical, biological, radiological, or nuclear materials. ISIS has made its ambition known that it wishes to obtain WMD material and use it in an attack. Underscoring the real possibility of this threat, Australian intelligence officials have publicly stated their

belief that ISIS has already seized enough material from Government facilities, hospitals, and universities in Iraq and Syria to build a dirty bomb.

Currently, the Department of Homeland Security is organized to address the WMD threat through several different offices and directorates, the Office of Health Affairs (OHA), the Domestic Nuclear Detection Office (DNDO), and elements of the Science and Technology (S&T) Directorate. This fragmentation is in contrast to other Departments and Federal agencies across the U.S. Government that have centralized WMD defense programs and have clear focal points for interagency collaboration. One of the major concerns we have heard with the current structure is that DHS does not have the stature and voice that it should among all of the agencies working to address all of these threats.

In September of 2013, DHS was directed by Congress to undertake an in-depth review of its WMD programs. The review also required recommendations to improve its organizational structure to be more effective. Unfortunately, the committee only received this report less than a month prior to this hearing, meaning that it's nearly 2 years late.

I've had the opportunity to sit down with Dr. Gowadia, director of DNDO numerous times during my short tenure as Chairman as part of my oversight responsibilities to learn how DNDO operates and works with its stakeholders, both domestically and internationally. One thing that I have concluded, and have heard repeatedly from others, is that the current DNDO model works; something which unfortunately can't be said about every DHS office. In support of the opinion that DNDO is one of the most effective offices within the Department, the most recent 2014 edition of the Best Places to Work in the Federal Government ranked DNDO 11th out of 314 agency subcomponents. This success is built on leadership, a clear mission, and a well-functioning organizational structure. And while DNDO hasn't always been a benchmark of success, the organization has certainly matured into a model that I think should be replicated throughout the Department.

Chairman McSally and I convened our subcommittees here today to examine whether the DHS proposal to reorganize will support the shared opinion of most that the Department of Homeland Security should be doing more to guard against WMD threats. While the proposal to Congress lays out several different options and a proposed recommendation for how the Department should reorganize, we hope to hear more today about how this proposed reorganization will address gaps and strengthen the Department's posture towards WMD threats and we hope to hear some specifics. I thank Chairman McSally for joining me in this effort, and I thank the witnesses for being here today.

Mr. RATCLIFFE. The Chair now recognizes the Ranking Member of the Subcommittee on Emergency Preparedness, Response, and Communications, the gentleman from New Jersey, Mr. Payne, for his opening statement.

Mr. PAYNE. Thank you, Mr. Chairman.

Good afternoon. I also want to thank Chairman McSally, along with you, for holding today's hearing to evaluate the Department of Homeland Security's proposal to reorganize certain chemical, biological, nuclear, radiological, and explosive counterterrorism programs. I understand that the committee may consider a Department of Homeland Security authorization bill later in this Congress, potentially as early as this fall, and that pending reorganization plan may be included in that.

I caution against acting too swiftly. Experience tells me that the reorganizations can be distracting, disruptive, and demoralizing to a workforce. Indeed, the Department itself continues to struggle with the morale challenges that date back to its inception. Before acting, it is imperative that this committee have an understanding of the full implications and can ensure that the benefits outweigh the costs.

As Ranking Member on the Subcommittee for Emergency Preparedness, Response, and Communications, I have particular concerns about how the proposed reorganization will affect legacy offices' relationships with the State and local response partners. My

subcommittee has devoted a significant amount of time to assessing what DHS does well and what it needs to do better with respect to helping State and local governments bolster their ability to respond to biochemical threats.

Although local first responders and the public health officials have noted that the Office of Health Affairs has improved its engagement activities in the recent years, they urge better coordination and more timely information sharing related to chemical biothreats. I'd be interested to hear what safeguards would be in place to prevent disruption of these important relationships and whether this reorganization is necessary to deliver the improved coordination information sharing that State and local responders have been seeking for quite some time.

Additionally, I am interested to learn how DHS will ensure that there will not be winners and losers with respect to resources for the various CBRNE threats. For example, for the past several years, the Office of Health Affairs' Chemical Defense Program has been operating on a shoestring budget of about \$800,000 out of an overall \$125 million budget, whereas NBIC and BioWatch collectively eat up over \$90 million.

Meanwhile, DNDO's budget is more than double OHA's budget. DNDO does its own research and development and OHA does not.

Regardless, I'll be interested to understand how the reorganization will affect the distribution of resources among the various CBRNE threat-related activities. Moreover, I'd like to note the proposed reorganization appears to be a bit lopsided. While the new CBRNE office would have R&D responsibilities and radiological and nuclear activities, the Science and Technology Directorate would retain R&D for chemical and biological activities.

Accordingly, I'm interested to know whether it indicates that the future reorganizations may need to be down the road; specifically, we can expect the Department to come back in a year or 2 and ask for CBRNE and R&D be fully realigned in their S&T or CBRNE office.

Finally, I would like to express my concern regarding the impact of the proposed reorganization on the activities of the chief medical officer. I am particularly concerned about the risk that CMO would lose a direct line to the Secretary and that the CMO's DHS workforce health responsibilities would get lost in a larger CBRNE office.

In closing, there are four fundamental questions that we need answered as we consider the Department's proposal: How will the proposed reorganization advance CBRNE missions while preserving existing relationships? What savings or additional costs will be incurred with the proposed reorganization yield? What improvements to oversight and management of the activities within this new office are expected to be realized? Finally, what steps will be taken to contain the negative impacts of such a reorganization on employee morale?

With that, Mr. Chairman, I would like to thank the witnesses for being here today, and I yield back the balance of my time.

Mr. RATCLIFFE. I thank the gentleman.

The Chair now recognizes the Chairman of the Subcommittee on Emergency Preparedness, Response, and Communications, the gentlelady from Arizona, Ms. McSally, for her opening statement.

Ms. MCSALLY. Thank you, Mr. Chairman. I'm pleased our subcommittees are meeting today to consider the optimal organization of the Department of Homeland Security to meet the chemical, biological, radiological, nuclear, and explosive threats that face our Nation.

We know terrorist groups have long strived to employ chemical, biological, radiological, and nuclear, or CBRNE materials in their attacks. The director of national intelligence testified in February that weapons of mass destruction continue to be a major threat to the security of the United States. He noted that biological and chemical materials and technologies, as well as personnel with their expertise to use and design them, move easily in the economy. The DNI also stated that infectious disease continues to threaten our security and that a more crowded and interconnected world is increasing the opportunities for human and animal diseases to emerge and spread globally.

Experts suggest the terrorists' interests in utilizing chemical agents has also increased. In fact, reports indicate ISIS may be currently conducting attacks using chemical agents in Syria and Iraq. Last summer, the laptop reportedly retrieved from an ISIS hideout in Syria contained plans for weaponizing bubonic plague and a document discussing the advantages of using biological weapons.

Earlier this year, the Emergency Preparedness Subcommittee held hearings on chemical and biological threats. In addition to the severity of the threat, these hearings highlighted a number of crosscutting themes. Witnesses testified about the need for more robust information sharing among all levels of government, and I introduced a bill to address this aimed at enhancing CBRNE intelligence and information sharing, which recently passed the House.

We also repeatedly heard about the importance of strong coordinated leadership to counter these threats, which brings us to the purpose of our hearing today. DHS must play a leading role in defending our homeland from these CBRNE threats. In my first 6 months in office, I've gained an appreciation of the work of the Office of Health Affairs in this particular space. As the coordinator for chemical defense at DHS, OHA works with Federal, State, and local partners to enhance preparedness and response capabilities for an attack or an incident involving chemical agents, as we recently saw in a chemical defense pilot with the city of Baltimore mass transit system.

In addition to managing biological surveillance and detection systems for the Nation, OHA coordinates the Department's efforts related to biological threats, such as anthrax or Ebola. OHA also completed an interagency effort to develop guidance for emergency response providers to increase survivability of victims, as well as safety of responders after an attack using an improvised explosive device.

Despite this good work, the Department's chemical and biological efforts have not been without their challenges. These are serious threats, and I really look forward to hearing from our witnesses

today from DHS on how the Department is proposing to address them. I'm also interested in hearing from both panels how the proposed reorganization will elevate the CBRNE mission and provide the strong leadership to ensure the Department is able to meet these threats.

I yield back the balance of my time.
[The statement of Chairman McSally follows:]

STATEMENT OF CHAIRMAN MARTHA MCSALLY

JULY 14, 2015

We know that terrorist groups have long strived to employ chemical, biological, radiological, and nuclear, or CBRNE, materials in their attacks. The director of national intelligence testified in February that weapons of mass destruction continue to be a major threat to the security of the United States. He noted that biological and chemical materials and technologies, as well as personnel with the expertise to use and design them, move easily in the economy. The DNI also stated that infectious disease continues to threaten our security and that a more crowded and interconnected world is increasing the opportunities for human and animal diseases to emerge and spread globally.

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Which brings us to the purpose of our hearing today: DHS must play a leading role in defending our homeland from CBRNE threats. In my first 6 months in office, I've gained an appreciation of the work of the Office of Health Affairs (OHA) in this space.

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Despite this good work, the Department's chemical and biological efforts have not been without their challenges.

These are serious threats and I look forward to hearing from our DHS witnesses on how the Department is addressing them. I am also interested to hear from both panels how the proposed reorganization will elevate the CBRNE mission and provide strong leadership to ensure the Department is able to meet these threats.

Mr. RATCLIFFE. I thank the gentlelady.

Other Members of the subcommittees are reminded that opening statements may be submitted for the record.

[The statement of Ranking Member Thompson follows:]

STATEMENT OF RANKING MEMBER BENNIE G. THOMPSON

JULY 14, 2015

Good afternoon. I thank the Chairmen and Ranking Members of these two subcommittees for holding this important hearing.

I welcome today's witnesses, and look forward to their detailed testimony.

The Department of Homeland Security has approached this committee with a reorganization proposal to establish a central headquarters office responsible for assessing and responding to chemical, biological, radiological, nuclear, and explosives threats (CBRNE) to the Nation.

The Department's proposal recommends merging the Domestic Nuclear Detection Office (DNDO) and the Office of Health Affairs, which is currently headed by the Department's chief medical officer.

The threat from a weapon of mass destruction is complex and the potential harm that could affect our citizens is unimaginable.

First responders need a Federal partner who can help them address these threats.

I believe the Department of Homeland Security can be that Federal partner and throughout my tenure on this committee, I have supported bipartisan legislation to assist in these efforts.

However, I still have concerns about the consequences of this realignment structure.

For instance, after Hurricane Katrina, it became apparent that the Secretary of Homeland Security needed the counsel of a doctor who would be able to provide advice on threats with public health consequences, provide necessary medical guidance on workforce health, and serve as a resource to components.

As Congress worked to draft the Post-Katrina Emergency Management Performance Act, I worked closely with the Department of Homeland Security's first chief medical officer to ensure that the role of the Chief Medical Office was appropriately defined.

In the past, I have expressed concern that the CMO's mission as primary medical advisor to the Secretary and her workforce health and component support responsibilities have been overshadowed by challenges posed by managing BioWatch and the National Biosurveillance Integration Center.

The Department's proposal to move the chief medical officer to the new CBRNE office does not relieve my concerns.

In fact, I am concerned that if moved to a new CBRNE office, the chief medical officer may lose her direct line to the Secretary, which would be a step backward.

The chief medical officer's role as the Secretary's doctor is vital and must be preserved.

Additionally, I would note that while the Office of Health Affairs struggled with the now defunct BioWatch Gen-3 acquisition, it is unclear whether and how this reorganization would address the acquisition challenges experienced by not only OHA but also DNDO.

DNDO also has a history of flawed acquisitions programs that have wasted taxpayer dollars.

For instance, the Advanced Spectroscopic Portals were intended to detect illicit nuclear materials and devices that could be shipped in cargo entering the United States.

The Government Accountability Office determined that DNDO underestimated the cost of this acquisition, overstated its benefits, and provided misleading information to Congress.

Although I am not rejecting the DHS proposal, it would be irresponsible for this committee to act on it in a hasty manner, without giving due consideration to why the reorganization is happening, how it will affect the missions currently carried by the existing offices, whether and the degree to which it will improve DHS's CBRNE mission, and how it will affect workforce morale.

To legislate without careful consideration of these important issues could undo a decade's worth of this committee's work in that mission space.

Thank you, and I yield the balance of my time.

Mr. RATCLIFFE. We're pleased to have a very distinguished panel before us today on this important topic. Dr. Reginald Brothers is the under secretary for science and technology at the United States Homeland Security.

Dr. Brothers, good to see you again. Thank you for being here.

Dr. Kathryn Brinsfield is the assistant secretary and chief medical officer with the Office of Health Affairs at the U.S. Department of Homeland Security.

Good to have you, Doctor.

Dr. Huban Gowadia is the director of the Domestic Nuclear Detection Office at the U.S. Department of Homeland Security.

Welcome back, Dr. Gowadia.

I'd now ask the witnesses to stand and raise your right hand so I can swear you in to testify.

[Witnesses sworn.]

Mr. RATCLIFFE. You may be seated.

Let the record reflect that the witnesses all answered in the affirmative.

The witnesses' entire written statements will appear for the record. The Chair now recognizes Dr. Brothers for 5 minutes.

TESTIMONY OF REGINALD BROTHERS, UNDER SECRETARY FOR SCIENCE AND TECHNOLOGY, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. BROTHERS. Chairman Ratcliffe, Chairman McSally, Ranking Member Payne, and distinguished Members of the subcommittee, thank you for this opportunity to discuss the Department of Homeland Security's approach to weapons of mass destruction and formation of a potential CBRNE office within the Department. I would also like to thank the Members of the subcommittees for their longstanding interest in and support of the Department and the Science and Technology Directorate and our work to combat CBRNE threats.

On April 22 last year, Secretary Johnson announced the Strengthening Departmental Unity of Effort Initiative. Through this initiative, the Secretary has directed the Department to improve internal processes, increase joint operational planning in DHS operations, and better coordinate and align departmental capabilities.

Consistent with the Unity of Effort Initiative, the Secretary directed the Department to revisit recommendations from 2013 regarding the Department's posture toward chemical, biological, radiological, and nuclear threats. The purpose was to see if there existed an opportunity for the Department to define roles and responsibilities to maximize CBRNE visibility and focus.

The ultimate recommendation to Congress signed by Deputy Secretary Mayorkas last month was to form a new CBRNE office in DHS headquarters led by an assistant secretary. The proposed office would focus specifically on coordinating CBRNE strategy and planning within the Department, reborn largely from integration of DHS's Office of Health Affairs and Domestic Nuclear Detection Office, along with specific elements of the Science and Technology Directorate, the National Protection and Programs Directorate, Office of Policy, and Office of Operations Coordination and Planning.

The intent of the proposed structure is to form a center of gravity for CBRNE functions within DHS headquarters in order to drive greater awareness, alignment, and joint action in the Department.

For almost any homeland security challenge in the Department, CBRNE or otherwise, the innovative technical solutions growing out of research and development will be essential to our continued success. R&D has changed a great deal over the last several decades. Before, experts in diverse fields could work independently from one another and create stand-alone products of great value, like a pair of reading glasses.

In the complex world we live in now, filled with advanced and rapidly-evolving technology, successful R&D requires a convergence of a once-fragmented field and dispersed knowledge. For example, a team bringing together electrical engineering, human biochemistry, neurosurgery, nano materials, and advanced manufacturing can create a hybrid bionic eye that uses a digital camera to help blind patients see. In fact, the FDA approved the first bionic eye for use in February 2013.

At S&T, one of the challenges we face is ensuring that our operators and end-users have steady access to innovation regardless of how the overall landscape transforms. In the Department, S&T is one of the few organizations that works with multiple operational components and across a full range of DHS missions. In support of the CBRNE mission area, for example, we work not only with OHA and DNDO, but also with multiple operational components in the Department and interagency, including the Secret Service, FBI, and State and local responders and hazardous material teams.

The range of expertise at S&T, combined with our reach across the Department, provides a unique opportunity to contribute to the unity of effort through numerous projects across organizational and technical areas.

To begin with, we have a stable portfolio of R&D projects to address long-term enduring focus areas for the Department, such as border aviation security. The portfolio also meets statutory responsibilities, such as to transition technology to State, local, Tribal, and territorial first responders. In this capacity, we act as a Federal sponsor and voice in mission areas from wildfires to CBRNE events.

As a complement to our longer-term R&D portfolio, S&T also plays an important role in helping the Department address immediate needs and pop-up issues. In the last year, we have been a go-to asset and source for on-demand science-based assessment on a range of urgent homeland security issues the Secretary and components have faced. That has included contributions to important Unity of Effort activities ranging from analytical support to the Department's Joint Requirements Council to independent assessments in critical Departmental mission areas.

To fulfill our immediate and long-term obligations to the Department, we must have strong relationships across the innovation ecosystem. The concept of a homeland security industrial base, a greater business community around homeland security missions is one we've work hard to advance over the last year-and-a-half.

Wider use of prize challenges, innovation, integration of technology accelerators that focus on small business innovation research enables us to target small businesses, start-ups, and other innovators that before may not have imagined Government as a customer for their business.

I can personally attest to the interest in this community in providing public safety and homeland security solutions that will make their children and children's children safer, and S&T will continue engaging them.

Our success in all the areas and initiatives I describe today is fueled by S&T's ability to maintain a workforce with diverse skill sets and expertise that is capable of serving as technical experts for

the Department, and when needed, quickly interfacing with and tapping into the S&T ecosystem.

On almost any Homeland Security issue that emerges, S&T has become a reliable resource for independent, scientifically sound technical assistance. We work every day to ensure our value to our customers and end-users. We'll bring the same enthusiasm to supporting a CBRNE office when and if it becomes an entity in the Department.

Thank you.

[The joint prepared statement of Mr. Brothers, Dr. Brinsfield, and Ms. Gowadia follows:]

JOINT PREPARED STATEMENT OF REGINALD BROTHERS, KATHRYN H. BRINSFIELD, AND HUBAN A. GOWADIA

JULY 14, 2015

Chairmen McSally and Ratcliffe, Ranking Members Payne and Richmond; and distinguished Members of the Subcommittees on Emergency Preparedness, Response, and Communications, and Cybersecurity, Infrastructure Protection, and Security Technologies, thank you for inviting us to speak with you today. We appreciate the opportunity to testify on the Department of Homeland Security's (DHS) work to strengthen Departmental Unity of Effort with regard to chemical, biological, radiological, nuclear, and explosive (CBRNE) threats to our Nation. As the leaders of three of the organizations involved in the consolidation of CBRNE functions into one office within DHS, we appreciate your interest in this matter. We also appreciate the attention Secretary Johnson and Deputy Secretary Mayorkas have given to the issue of aligning the CBRNE mission within their vision of a streamlined Department, and we have worked closely with them to put forward a proposal that enhances coordination and Unity of Effort.

BACKGROUND

The Senate Explanatory Statement accompanying the fiscal year 2013 DHS Appropriations Act directed that DHS review its chemical, biological, radiological, and nuclear (CBRNE) programs and functions. The Secretary of DHS at the time, Janet Napolitano, directed the DHS Office of Policy (PLCY) to lead a review team in conducting an impartial, collaborative assessment of potential alignment options. The review team identified realignment criteria and desired outcomes, conducted an independent analysis, and consulted with the Domestic Nuclear Detection Office (DNDO), Office of Health Affairs (OHA), Science and Technology Directorate (S&T), leadership of other DHS components and select interagency partners.

The review team analyzed organizational models ranging from informal coordination to mission integration and identified several alignment options for DHS leadership to consider, each with its own benefits and drawbacks. The then-existing organizational structure was deemed by review participants to be insufficiently robust to achieve future goals and outcomes in the CBRNE area. The results of the review, including the recommendation to establish a consolidated 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.

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 headquarters realignment. As part of the initiative, DHS 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 staff, the Secretary's intent to realign DHS PLCY and the Office of Operations Coordination and Planning (OPS) based on their core functions and consolidate certain DHS headquarters external affairs functions. These changes are intended to focus headquarters offices on the principal objectives of the Unity of Effort initiative, including to integrate the broad and complex DHS mission

space and empower DHS components to effectively execute their operations. The Department's commitment to the Secretary's Unity of Effort initiative drove the Department to re-visit the recommendations from the 2013 CBRNE review.

PROPOSED STRUCTURE OF CBRNE ORGANIZATION

The "DHS Chemical, Biological, Radiological and Nuclear Functions Review Report" was signed by Deputy Secretary Mayorkas on June 17, 2015, pursuant to the Joint Explanatory Statement accompanying the fiscal year 2013 DHS Appropriations. The report is based on the initial 2013 review, and is further informed by the Secretary's Unity of Effort initiative and DHS's recent review of the National Protection and Programs Directorate (NPPD). If agreed to by Congress, the recommended structure for a CBRNE office is as follows:

- (1) The DHS CBRNE office would be led at the assistant secretary level, as a direct report to the Secretary. The assistant secretary position (A/S CBRNE) would be empowered to coalesce and elevate CBRNE issues to the Secretary in support of the DHS operating components and represent DHS on these matters within the Federal interagency as well as with external stakeholders at the State and local levels and with private-sector partners. The A/S CBRNE would be the Department-wide lead representative at appropriate internal, inter-agency, and international venues related to DHS CBRNE strategy, policy, planning, programming, budgeting, investment, and joint operational planning and joint operational matters. The DHS CBRNE office shall not conflict with other DHS component legislative mandates to conduct appropriate internal, inter-agency, and international engagements related to CBRNE.
- (2) The A/S CBRNE would be responsible for coordinating and maintaining Department-wide CBRNE-related strategy, policy, situational awareness, threat and risk assessments, contingency planning, operational requirements, acquisition formulation and oversight, and preparedness across all elements of Presidential Policy Directive 8, "National Preparedness" (i.e., prevention, protection, mitigation, response and recovery), consistent with relevant statutory authorities and extant Presidential directives, including but not limited to Presidential Policy Directive 2 and Homeland Security Presidential Directives 10, 18, 21, and 22. This work will complement the capability-building and sustainment efforts managed by the Federal Emergency Management Agency (FEMA).
- (3) The new office would be primarily comprised of the consolidation of DNDO and OHA, including the BioWatch Program. The director of DNDO and the DHS chief medical officer (CMO), as well as other relevant supervisory positions depending on the final organizational construct, would report to the A/S CBRNE on chemical, biological, radiological, nuclear, explosives, and emerging infectious diseases and workforce health issues within their cognizance. Under this 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 are needed. However, these leaders would no longer be formal direct reports to the Secretary.
- (4) Specialty CBRNE personnel from DHS PLCY and DHS OPS would permanently transfer along with the DHS policy and operations support functions they perform, to the CBRNE office to further strengthen the center of gravity of the new office.
- (5) Chemical, biological, and integrated risk assessment, functional responsibilities from S&T would be permanently transferred to the CBRNE Office.
- (6) NPPD's Office for Bombing Prevention (OBP), which builds capabilities to counter the use of explosives in the homeland, would also be permanently transferred.

Under the recommended structure, DHS is creating a coherent nexus for DHS CBRNE functions within the DHS HQ. The structure will foster greater harmony of effort for priority CBRNE issues and greater awareness by external and internal organizations regarding the appropriate CBRNE DHS focal point for most CBRNE issues. In addition to better aligned support programs and activities, the new structure will strengthen DHS CBRNE-related operational activities in DHS's operating components. FEMA specifically has indicated the establishment of the A/S CBRNE role will support their efforts to leverage CBRNE analytic and technical capabilities to enhance component operations related to CBRNE. Additional benefits will likely be realized as the Department matures its planning, programming, budgeting and execution system, joint operational planning, and joint operations over time.

ANTICIPATED IMPACTS

The new Departmental structure will have demonstrable impacts across the CBRNE spectrum of activities for prevention, protection, mitigation, response, and recovery. This will be accomplished in two ways: (1) The inclusion of CBRNE policy and operational support personnel within the CBRNE Office, and (2) establishing strong linkages between the CBRNE office and the new DHS Joint Requirements and Joint Operational Plans processes. DHS OHA, DNDO, S&T, and the Office for Bombing Prevention will be realigned in sum or part to ensure the CBRNE office has all tools available for a cohesive, competent, and functional organization.

OHA.—The CBRNE office will subsume OHA in total, and will expand beyond the historic OHA purview to additionally encompass the broader impact of chemical and biological threats. Under the current structure, OHA's experts advise and support DHS leadership, its workforce, and public and medical health officials Nation-wide to prepare for, respond to, and recover from threats to the Nation's health security. This role will continue in the CBRNE Office. In addition, the CMO will be able to add the capability to leverage existing highly-skilled experts that had previously been in other parts of DHS to further the Department's end-to-end planning for CBRNE threats. 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, support for the first responder community, medical quality management, and interagency coordination on health/medical issues will be further enhanced 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.

DNDO.—The CBRNE office will subsume DNDO in total with all current functions remaining intact. DNDO was chartered, in law and Presidential directive, using an interagency construct to coordinate efforts across the U.S. Government (USG) to detect and protect against radiological and 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 U.S. interagency 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, research and development (R&D), acquisition, training, exercises, etc.) to improve coordination across the USG. DNDO conducts a holistic program of end-to-end efforts in nuclear detection and nuclear forensics, including planning, research and technology development, technology acquisition, and support for Federal, State, and local operators.

OBP.—The CBRNE office will subsume OBP in total with all current functions remaining intact. OBP accomplishes its mission to protect life and critical infrastructure by coordinating counter-improvised explosive device efforts, performing capabilities analysis, planning and decision support, and providing training and awareness. Moving the bombing prevention activities into the office will allow better coordination with State and local outreach without disrupting the capabilities the Department provides to critical infrastructure owners and operators and the private sector across the CBRNE space.

S&T.—S&T will transfer to the CBRNE office the chemical, biological, and integrated risk assessment and material threat functions. This will allow appropriate consolidation between risk determination and strategy and policy development, enhancing cohesion between these functions. The chemical and biological R&D functions within S&T and the facilities at which the work is conducted will not transfer to the CBRNE Office. However, as the center of gravity for the Department on matters related to CBRNE, robust and consistent coordination between DHS S&T and the CBRNE office will be required to ensure accountability and transparency of R&D efforts in alignment with the Secretarial strategic guidance to achieve operational results, a principal tenet of Departmental Unity of Effort.

CONCLUSION

The Department's proposed CBRNE reorganization will foster Unity of Effort across the Department by integrating and strengthening DHS CBRNE coordination, roles, and responsibilities for improving outcomes and accomplishing goals. We look forward to working with Congress in turning the Department's intent into reality. Thank you for your time and interest in this issue. We look forward to answering your questions.

Mr. RATCLIFFE. Thank you, Dr. Brothers.

Dr. Brinsfield, you've got 5 minutes.

TESTIMONY OF KATHRYN H. BRINSFIELD, ASSISTANT SECRETARY, OFFICE OF HEALTH AFFAIRS, U.S. DEPARTMENT OF HOMELAND SECURITY

Dr. BRINSFIELD. Thank you, sir.

Chairmen Ratcliffe and McSally, Ranking Member Payne, and distinguished Members of the subcommittee, thank you for your attention to this matter. I appreciate the opportunity to speak to you alongside my colleagues about CBRNE threats and the health needs of our agency and Nation. My remarks today will focus on the importance of the DHS focus on CBRNE and health threats and how a unified office can support and amplify the work we do at the Office of Health Affairs.

OHA has an important mission space. Led by an assistant secretary and chief medical officer, OHA is a headquarters office built to fill the need of the Secretary and component leadership for expert advice and guidance on biological, chemical, and health issues that affect our workforce and security.

Our programs encompass biological detection and surveillance, chemical defense, and health and medical-related guidance on workforce mission effectiveness and risk mitigation. We also provide guidance for State and local preparedness and response efforts related to chemical, biological, or medical threats. Our staff of doctors, nurses, scientists, veterinarians, and first responders have years of real-world experience and are uniquely capable of providing expert advice to senior decision makers and front-line employees.

There are threats and risks to our Nation related to CBRNE and health, and those that wish to do us harm continue to try new methods and approaches. Chemical agents can kill, incapacitate, cause long-term harm, and contaminate critical infrastructure. OHA has received directed funds for chemical defense demonstration projects in subways, ports, and large venues. When completed, these projects will provide critical analysis of emergency response systems, identify community-relevant solutions, and develop best practices. We appreciate Congress' attention on chemical threats and hope to work collaboratively in the future with you on this issue.

A catastrophic biological event, whether natural or intentional, could cause thousands or in some cases hundreds of thousands of casualties, weaken the economy, and threaten National security. Radiological, nuclear, and explosive threats are similarly dangerous, and all of these together present a risk of both mass destruction and mass disruption.

Our mission to prepare for weapons of mass destruction is critical. Threats that are low probability with high consequence require daily preparation and planning.

Similarly, the mission to prepare for threats of mass disruption is critical. Recent events in the United States and the world have shown us that these incidents can wreak havoc on economies, impact public trust and infrastructure, and cost human lives. The near-daily rhythm of these threats strengthens our response as we learn by practice and reinforce our working relationships.

Our partners in the Office for Bombing Prevention do important and complementing work to that of OHA and DNDO. They focus on capability and capacity building for State, local, and private-sector stakeholders so they may counter improvised explosive devices. They are a small office with a big impact, and in partnership with our DOJ counterparts are helping to keep us safer.

The first response to any incident is local. From big chemical attacks to major disasters, local communities need help to ensure that they have the right systems in place to act when a threat occurs. The CBRNE office will create an environment that can foster stronger coordination between OHA's chemical, biological, and health programs, DNDO's radiologic- and nuclear-focused programs, and the Office for Bombing Prevention's work. By bringing together our offices into this new organization, we'll be able to leverage our existing detection capabilities, protocols, and expertise to help facilitate coordinated Federal, State, and local detection, response, and recovery.

The chemical, biological, and integrative risk assessment and material threat functions currently performed in S&T will also be an important element within the CBRNE office. The risk assessments inform the work done by our chemical and biological programs and are critical to the decisions and priorities made by us and our partners at all levels of Government.

OHA currently addresses all incidents, whether a major hurricane or disease outbreak, from an integrative perspective using both technical threat-based expertise and health knowledge. OHA supports front-line responders as they protect communities and helps incorporate health considerations into the National response to a threat.

For example, OHA led DHS's coordinated Ebola response efforts and worked closely with Customs and Border Protection to set up screening protocols that helped keep our officers and traveling public safer.

OHA manages the DHS medical countermeasure stockpile so it is best able to protect our workforce. We have embedded physicians in more than half of the operational components supporting their work. For example, they teach front-line personnel how to mitigate the spread of disease among detainees at the border, they train our paramedics on how to provide care in remote locations, and they support best practice development for the safe monitoring of internal drug smugglers. We look forward to taking this integrated capability and further applying it to radiological, nuclear, and explosive mission spaces.

I am proud of what OHA and our talented staff have already accomplished and look forward to elevating the CBRNE mission, continuing health support to our components, and working across the enterprise to create efficiency of action. When an agency such as FBI or DOD reaches out to DHS, we will be coordinated and ready to work with their equivalent offices. When State, local, non-Governmental, and private partners reach to us for help, we can assist them regardless of the incident or the changing nature of the threat they face.

As our world grows more complex, we need to leverage our capabilities and expertise to work together seamlessly. I thank you for your time and look forward to answering any questions.

Mr. RATCLIFFE. Thank you, Dr. Brinsfield.

Dr. Gowadia, you are recognized for 5 minutes.

TESTIMONY OF HUBAN A. GOWADIA, DIRECTOR, DOMESTIC NUCLEAR DETECTION OFFICE, U.S. DEPARTMENT OF HOMELAND SECURITY

Ms. GOWADIA. Good afternoon Chairman Ratcliffe, Chairman McSally, Ranking Member Payne, and distinguished Members of the subcommittee. Thank you for inviting my colleagues and me to discuss the proposed reorganization of the Department of Homeland Security's CBRNE programs. Through this merger, and in concert with the Secretary's Unity of Effort Initiative, the Department seeks greater coordination across its CBRNE missions, enabling the articulation of its priorities.

As evident in the 2014 Quadrennial Homeland Security Review, nuclear and bioterrorism remain high priorities for the Department. I would like to emphasize that the Domestic Nuclear Detection Office's structure, mission, and functions will continue intact in the new CBRNE office.

DNDO was established in 2005 as an interagency office and has two missions, nuclear forensics and nuclear detection. DNDO's holistic end-to-end approach includes developing strategies, conducting research and development, and deploying its supporting capabilities for our operational partners.

To maximize the ability to detect and interdict threats, and to attribute threat materials to their sources, we rely on a critical triad of intelligence, law enforcement, and technology. We work with our Federal, State, and local partners, as well as those in the National laboratories, industry, and academia to make that triad a reality.

For technical nuclear forensics, DNDO leads centralized planning and integrates interagency efforts. In response to an in extremis National capability, we are investing in the next generation of U.S. nuclear forensic scientists. In fact, we have already exceeded our goal at 35 new Ph.D.s into the workforce by 2018.

For nuclear detection, DNDO coordinates the U.S. Government's interagency efforts to develop a global nuclear detection architecture and assess its current and planned capabilities against evolving threats. To develop breakthrough technologies and provide significant operational improvements, we conduct transformational research.

Determined to learn from and never repeat prior missteps, DNDO has implemented a disciplined approach to acquisition and deployment that involves our end-users at every step of the way. Today, we have provided thousands of radiation detectors to the Department's operational components so they can perform their nuclear detection missions at ports of entry, along our land and maritime borders, and in the interior of the United States.

Importantly, all systems under consideration are subjected to rigorous testing and evaluation before deployment. Critical to mission success is supporting partners with more than technology. DNDO

works with Federal, State, and local stakeholders to build and enhance their detection capabilities through pilots, training, exercises, and cross-jurisdictional protocols.

Additionally, our Red Team assists operational agencies in evaluating their systems and associated tactics, techniques, and procedures. Through these operations, law enforcement and public safety officials gain critical experience with uncommon nuclear sources leading to improve readiness and performance. Hence, DNDO's unique end-to-end approach ensures critical functions are integrated and synchronized from gap identification to concept development to use in the field.

This approach has yielded great dividends for the Nation and the Department. For instance, through our Securing the Cities program, we have established a robust nuclear detection capability in the New York City, Jersey City, and Newark region. Over time, the region's operational familiarity with the mission has grown, and we are now positioned to collaborate on the demonstration of an advanced concept whereby radiation detection systems will be integrated with other sensors to provide an early warning system for nuclear threats.

Another example is our technical contribution to reduce the operational burden to CBP Officers in responding to nuisance alarms from benign radioactive sources without the loss of sensitivity to threats. Collaborating closely with CBP, we have reduced radiation portal monitor nuisance alarms by approximately 75 percent on average, thereby facilitating the flow of legitimate commerce and freeing up CBP Officers to support other National security efforts.

My teamed, ranked No. 11 overall out of more than 300 agency subcomponents in the 2014 "Best Places to Work in the Federal Government" and ranked No. 2 in the innovation category, looks forward to the merger, expecting that new opportunities will arise as we seek creative synergies with our partners across the Department. For instance, we would collaborate more closely with the Office of Bombing Prevention on the detection of dirty bombs.

DNDO's comprehensive approach ensures a range of effective solutions to meet our Congressionally-mandated responsibilities to prevent nuclear terrorism. The very real and evolving threat demands an informed, agile, and networked Federal, State, and local capability. We will continue to advance the nuclear detection and forensics mission as we share best practices along with our colleagues addressing other threats.

A consolidated CBRNE office allows us to build on our strengths, combine expertise, and learn from one another. We look forward to working with the subcommittees on this effort.

Thank you very much.

Mr. RATCLIFFE. Thank you, Dr. Gowadia.

The Chair now welcomes and recognizes the Ranking Member of the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, the gentleman from Louisiana, Mr. Richmond.

Mr. RICHMOND. Thank you, Mr. Chairman. I will just submit my opening for the record. I'd ask unanimous consent to do that.

Mr. RATCLIFFE. Without objection.

[The statement of Ranking Member Richmond follows:]

STATEMENT OF RANKING MEMBER CEDRIC L. RICHMOND

JULY 14, 2015

Good afternoon Mr. Chairman, and Chairwoman McSally, and I want to welcome my fellow Ranking Member, Mr. Payne to this joint subcommittee hearing.

I also want to thank our witnesses today, the Department officials on our first panel, and the practitioners on the second panel who have specialized knowledge of how our nuclear and biological detection programs work.

As the Chairman noted, today's hearing will focus on the administration's plans to merge the Domestic Nuclear Detection Office, or DNDO, with the Office of Health Affairs, or OHA, to form a "Weapons of Mass Destruction" office in headquarters.

This merged office, as proposed, would focus on the challenges we face from an array of chemical, biological, nuclear, and explosives threats, commonly referred to as CBRNE.

I applaud Secretary Johnson's pledge to elevate CBRNE focus and visibility within DHS. These are serious threats, and our efforts to combat them must be equally serious.

The history of this proposal shows how important careful consideration is. Even though the original proposal for the creation of DHS in 2002 included a specific office and Under Secretary for Chemical, Biological, Radiological, and Nuclear Countermeasures,¹ Congress chose to direct many of those functions to the Under Secretary for Science and Technology (S&T).²

And, over the past few years, the Committees on Appropriations have instructed the Department to take a "holistic approach toward realignment," suggesting that simply merging offices may not fully address CBRNE deficiencies, or might create new inefficiencies.

As we examine the proposal today, I hope we will focus on the heart of the issue: How can we best protect the American people from chemical, biological, radiological, nuclear, and explosive threats.

We should not simply approve changes to an organizational flow chart and call it a day. We must make sure that those changes are made with proper planning and fully thought-out so that we strengthen and improve the Department. As GAO puts it, ". . . the end result of a government reorganization should not simply be a collection of component units, but the transformation to an integrated, high-performance organization."³

As we are going to hear today in testimony, the scale of the reorganization may itself pose a challenge. The results of both policy and operational choices made during this reorganization may affect its eventual short- and long-term success.

The key factors for the Department, and for our subcommittees to consider include: Identifying the optimal structure for an office focusing on weapons of mass destruction and the mission, scope, and appropriate leadership of that new office.

Additionally, we should keep in mind the message this committee delivered in 2010, under then-Chairman Thompson, when it offered a combined S&T and DNDO authorization in the belief that there can be conflicts of interest between research & development and procurement, so those are best left to separate organizations. While not all goals of that legislation were achieved, the message was clearly delivered.

What I hope we are going to hear today is, "How can the Department's overall mission be better defined?"

Let me finish with this thought. On the ground, and every day, our nuclear deterrence and biodefense effort as a Nation depends on motivated and vigilant officers across the globe, supplied with the best equipment and intelligence we can give them.

Officers working at our Nation's ports of entry have an especially complex and difficult job. Thousands of decisions are made every day all across our borders, ports, and airports, to clear a container or a vehicle for transit into the United States. These are vital components in the flow of commerce in the world's premier and largest trading market, the United States.

Other cargo requires further inspection, or even denial of entry or and interdiction action taken on a vehicle or person. That is the hard, cold, repetitive, and everyday reality of our mission to prevent a violent nuclear or chemical attack, or biological event or outbreak.

¹ Title III of H.R. 5005, as introduced, in the 107th Congress.

² Pub. L. 107-296, Title III.

³ Government Accountability Office, *Government Efficiency and Effectiveness: Opportunities for Improvement and Considerations for Restructuring*, GAO-12-454T, March 21, 2012.

We are grateful for all of our dedicated men and women in the field who protect us from weapons of mass destruction. I yield back.

Mr. RATCLIFFE. Dr. Gowadia, I'm going to start with you—well, actually, first of all, I'll recognize myself for 5 minutes.

Dr. Gowadia, I'm very much a believer in not fixing what isn't broken, and based on the testimony that we've already heard today, I think everyone here today would agree that we don't want to provide a solution that creates a problem, particularly with respect to DNDO and the good work that's being done there. So now that I've got you under oath, I'd like to ask you the impact that you think this proposed reorganization and the effect that it would have on DNDO, and would it affect the current high operations and morale that you're enjoying right now?

Ms. GOWADIA. Thank you, Chairman.

I have strongly supported and continue to believe very much in the Secretary's Unity of Effort Initiative. In fact, I would posit that DNDO is the very instantiation of that Unity of Effort concept. To that end, I think bringing DNDO over to the new office intact also adheres to one of the principles for the reorganization on preserving a program that is working.

With our singular focus—and I am truly blessed to work with an incredible team who gets their reward in serving the front-line operator—we will not be interrupting their ability to do that based on the concept we have for the new organization, and so I think we will be able to manage their morale. That will also be up to us in leadership to make sure that we allow them to do that which they do best and enjoy the most while we take care of the reorganization at our end.

Mr. RATCLIFFE. So in follow-up to that, Dr. Gowadia, I assume that having research and development within your office, you see that as a critical function when you talk about keeping things intact?

Ms. GOWADIA. Yes. Yes, Chairman, we do. The end-to-end focus is important for a technically challenging mission like radiation and nuclear detection. Every piece along the way needs strong technical input. In this day of hard fiscal times, we can little afford the redundancy of recreating technical expertise in multiple parts of the Department.

Mr. RATCLIFFE. Thank you.

So following up on that, I want to ask both Dr. Brothers and Dr. Brinsfield about that very issue. It was a concern that was also voiced by Ranking Member Payne in his opening.

Because, as you both know, when DNDO was created, in order to focus the organization and give the director all of those end-to-end tools needed, radiological and nuclear research and development was moved from S&T to DNDO. In fact DNDO is statutorily authorized to conduct that R&D.

But in this proposed reorganization, the chemical, biological, and explosives office, the R&D functions there were not moved from S&T. So I would like your perspectives on that.

I'll start with you, Dr. Brothers.

Mr. BROTHERS. Absolutely. Thanks for the question.

So I think there are different models and that's come up in some of the opening testimony. I think both models can coexist and both

models have shown themselves to be effective. Both models being the end-to-end model that Dr. Gowadia has and the interdisciplinary model that S&T has right now.

I think if you look historically, a number of years ago, science and technology, research and development was really based on disciplines being in different silos, physical science in one silo, life science in another silo, engineering in another silo.

What you're finding right now in both industry and academia laboratories throughout, what you find is the focus now on interdisciplinary research. In fact, you find a convergence, actually, of the life sciences, physical sciences, and engineering. Why is this? It's really because when you get people of different types of backgrounds together, they might make insights that wouldn't have been previously possible.

But, again, we can talk about different types of models. So in S&T, because we have such a wide range of stakeholders, from Transportation Security Administration, Customs and Border Protection, Secret Service, et cetera, we go across the gamut, it's important that we're able to cross-fertilize our innovative ideas with disciplines from across the entire range of disciplines that we have.

So from a perspective of an organization that can look across a broad area, it's fundamental, it's essential that we have interdisciplinary type of staff. However, that said, for a very specialized area, and particularly when we start considering trying to minimize disruption, other models can work as well.

Mr. RATCLIFFE. Thank you, Dr. Brothers.

Dr. Brinsfield, I want to give you an opportunity to respond on that as well, about not having the R&D functions for chem and bio in the new office and the effect that that might have.

Dr. BRINSFIELD. Thank you, sir.

We have been of an opinion since the beginning of these discussions that there are many correct ways to do this, and that we see our role in the chem and bio space as setting the requirements and working with the interagency, State, and local partners to set those requirements and let the R&D be done in a component such as S&T.

Mr. RATCLIFFE. My time has expired. I'd now like to recognize the gentleman from Louisiana for 5 minutes.

Mr. RICHMOND. Thank you, Mr. Chairman. I'm going to yield my time to the gentleman from—my co-Ranking Member on another subcommittee and the gentleman from New Jersey, Mr. Payne.

Mr. PAYNE. I would like to thank the gentleman from Louisiana for yielding.

I would like to start off, Dr. Brinsfield, I understand that DHS plans to expand the scope of its biodefense capabilities. Later this summer, the post-9/11 Commission Blue Ribbon Study Panel on Biodefense will release a report finding, among other things, there is a lack of National leadership in biodefense.

Do you envision this reorganization as a means to bolster DHS's role as a National leader in biodefense?

Dr. BRINSFIELD. Certainly we hope that this reorganization will elevate the mission space of CBRNE in whole, and with that we need to make sure that we are doing our requirements in the bio space. As you look through the QHSR report, you'll see that we've

spent a great deal of time working with our partners in DHS and other parts of the interagency to define DHS' role and to make sure that we adequately and completely fulfill that role in support of the work that goes on in the inter-Government space.

So, yes, sir, we hope to continue to advance and promote that work.

Mr. PAYNE. Past history in some of these areas that we've discussed, the ability or the lack of the ability for some of these different departments to work together, but what I'm hearing now, there's a new spirit of cooperation that is permeating the work that's being done in some of your departments.

In my opening statement I observed that proposed reorganization is not a complete realignment of CBRNE activities at DHS. There are CBRNE functions from across the Department, from FEMA to NPPD, that are not included in the realignment.

How did the Department decide to include certain activities but not others in the reorganization proposal?

Dr. BRINSFIELD. I think the decision was made after careful consultation across the different groups within DHS that the new organization should be a mission support office. To that end, it will be our job to enable the operational components to succeed at their mission spaces.

We view ourselves as subject-matter experts who can help components such as FEMA, CBP, the chemical program, and NPPD continue to do their jobs and do them well. In fact, we have provided subject-matter experts doing real-world events to help support those programs.

Mr. PAYNE. There's always a concern when you have these realignments what the outcome is going to be and how it impacts the morale of people that have been at the Department for years, that have worked diligently on their projects, and then to have it kind-of reorganized and lost in the shuffle does not tend to lead to great morale.

I have some questions about the practical implications of the proposed CBRNE reorganization. I understand that the Department does not anticipate any cost savings, but I am wondering if there might be some new costs incurred. For example, would the over 200 employees of the new CBRNE defense office be collocated? If so, where? What effect would this have on the existing leases?

Dr. BRINSFIELD. So, sir, we believe that as we continue to elevate this mission space and define this mission space clearly and settle this question, our experts that work in these areas will be able to continue to function, do their job, and we're looking forward to being able to support them doing that. We also note that no programs have been cut from this. As a matter of fact, one of the things that we feel most comfortable about is that the offices are moving in toto, and as Dr. Gowadia has stated, we'll be able completely combine all that work.

Dr. Gowadia and I operate our offices within a very short distance apart. In fact, our buildings are very close together. We have no plans for the future on movement until our current leases are up.

Mr. PAYNE. Okay. Thank you for that.

Mr. Chairman, I'll yield back.

Mr. RATCLIFFE. The gentleman yields back.

The Chair now recognizes the gentlelady from Arizona, Colonel McSally, for 5 minutes.

Ms. MCSALLY. Thank you, Mr. Chair.

Dr. Brinsfield, as you know, the Emergency Preparedness Subcommittee held a hearing earlier this year on chemical threats. Dr. Kirk testified. The Chemical Defense Program accounts for only \$800,000 of OHA's \$125 million budget. So will the reorganization bolster chemical defense activities? Do you think the Secretary intends to then have resources more equitably allocated towards chemical defense as the reorganization happens? Or how do you see that moving?

Dr. BRINSFIELD. So, certainly we share your concern and the knowledge that the chemical threat has become more prominent, and we watch that closely. We also note and thank you for all the additional funding that Congress has provided to the chemical program.

We think that it's very important to make these kind of decisions on a risk basis, and so we look forward to working with our colleagues across the area so that we can do our best job to use the funding that we're provided.

Ms. MCSALLY. Great. Thanks.

For Dr. Brinsfield and Dr. Gowadia. So a common theme in our subcommittee's hearings earlier this year on both chemical and biological terrorism was a need for robust information sharing. This is always a challenge both horizontally and vertically, as you know.

I recently visited our Arizona's counterterrorism fusion center and to learn more about the vital work that they are doing there to support, obviously, any counterterrorism activities in the State of Arizona.

Can you share your perspective on how you think this new office will coordinate with the Department's Office of Intelligence and Analysis and others in the intelligence community to ensure that the threat information is shared with fusion centers, emergency responders, other relevant State and local stakeholders? This is a challenge whether you're reorganizing or not, as you know. But how do you see it getting better with the reorganization?

Ms. GOWADIA. Thank you, ma'am, for that question.

As I mentioned in my opening statement, we rely significantly on that fusion of intelligence, law enforcement, and technology. So our ties to the intelligence community are strong and must continue. We have close and collaborating ties not just with the intelligence and analysis function, but across the board. In fact, we exchange detailees back and forth. We have Coast Guard intelligence officers at DNDO, and we have placed some detailees out into the intelligence community as well.

Working through I&A, we inform our State and local partners through the fusion center, as well as through publications, weekly and monthly publications on the state of affairs, lost and stolen sources, and very similarly with the counterterrorism community. So I only see it as continuing. I do not envision any change there-by.

Ms. MCSALLY. Okay. Great.

Dr. BRINSFIELD. We consider it an important part of our mission space as well. As you know, we staff various positions as details within I&A to both support the State and local program office and the CBRNE health space. We hope to continue that coordination.

Ms. MCSALLY. Great. Thanks. I know there has been some concerns talked about as far as managing the change and how that impacts morale, the management of human capital, keeping talent. Having been in the military 26 years, I've been through a lot of reorganizations, and I've seen them go well and seen them go poorly.

It seems like some of the best ones are done with the collaboration at the beginning of coming up with the better organization, if that makes sense, that there's collaboration as part of the process instead of a top-down one that you could then potentially have people resisting that change.

It sounds like, just from reading the documents, hearing your testimony today, that there's been a lot of collaboration to identify what are the best courses of action that will help you all do your jobs better, that won't lead to change resistance or competition between the specialties.

So I just want your perspectives on how that, how this has come about, because that can have the mission succeed or fail, if people are resisting the change. Do you see any challenges in managing people and cultures as you're meshing your different subparts together?

Dr. BRINSFIELD. So I think one of the things that we've always strived in our office for is to understand the many different and important cultures within DHS and to be able to provide coordination and support across those different subcultures of the organization. We've been coordinating and speaking to our staff about the discussions on-going, getting their input and feedback in different leadership meetings, and we believe they're engaged and will continue to be engaged as this process goes forward.

Ms. GOWADIA. Chairman, I have been at the Department from the very start, and I can tell you I have seen mergers and stand-ups and all of it all come together. Yes, there are very different cultures from legacy organizations as opposed to stand-up organizations.

With Secretary Johnson coming to the Department, I think we have struck a good balance, allowing legacy organizations to maintain some of their culture while ascribing to a unified mission at the Department level. I imagine we will reflect that exactly as we move forward with the new CBRNE office.

Ms. MCSALLY. Okay. Great.

My time has expired. Thank you.

Mr. RATCLIFFE. I thank the gentlelady.

The Chair now recognizes the gentlelady from New Jersey, Mrs. Watson Coleman, for 5 minutes.

Mrs. WATSON COLEMAN. Thank you, Mr. Chairman.

Thank you very much for being here today and sharing your information with us. I have a few questions, kind-of all over the place, but a couple of times you mentioned those who have expertise that made a decision about this reorganization. What was the entity, or who are the "they" that determine what this reorganization would look like?

Ms. GOWADIA. The Department undertook a review led by the Office of Policy in response to Congress' direction for us to take a look at this potential reorganization.

Mrs. WATSON COLEMAN. Is that Mr. Mayorkas?

Ms. GOWADIA. No ma'am.

Mrs. WATSON COLEMAN. Who is that?

Ms. GOWADIA. Back then it was under Assistant Secretary Heyman. But ultimately the decision was made by a deputy secretary and Secretary.

Mrs. WATSON COLEMAN. Okay. I'm a member of—actually, I'm the Ranking Member of the Subcommittee on Oversight and Management Efficiency, and we've heard a lot about the struggle that we've had in certain of the components with regard to acquisition management. So what protections will be in place in this new organizational configuration that will ensure that we have improved acquisition management and accountability?

Dr. BRINSFIELD. So, ma'am, I think as we look forward to working with the Department on the Joint Requirements Council, having decisions made in a coordinated fashion across the Department, that will help to inform the process. Also, Dr. Gowadia and I both intend to do responsible acquisition, and in fact, we are looking forward to working closely with Dr. Gowadia's staff, who have developed a certain amount of expertise in the acquisition area.

Mrs. WATSON COLEMAN. A quick question. Dr. Gowadia referred to her staff, as her place of work, as the 11th best place to work and the second-best something.

Ms. GOWADIA. Second-best in innovation, ma'am.

Mrs. WATSON COLEMAN. Thank you. So you all neglected to mention your ranking. Do you know what your ranking is with regard to whether or not it's one of the best or one of the least in terms of morale of that nature places to work?

Dr. BRINSFIELD. Ours is embedded somewhere within headquarters and it is somewhere around the middle of the area.

Mrs. WATSON COLEMAN. Dr. Brothers.

Mr. BROTHERS. We know. We were rated 314, so we were on the—we're near the bottom, yes.

Mrs. WATSON COLEMAN. Okay. Are there any additional costs associated with this reorganization? Will there be a request for additional funds? If so, how much?

Ms. GOWADIA. We do not envision that at this time, ma'am.

Mrs. WATSON COLEMAN. Alrighty. Thank you.

Thank you. I yield back.

Mr. RATCLIFFE. I thank the gentlelady, and recognize the newest Member of the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, gentleman from New York, Mr. Donovan, for 5 minutes.

Mr. DONOVAN. Thank you, Mr. Chairman. I hope no one recognizes my newness to the committee by my question.

I'd like to thank you all, Dr. Brothers, Dr. Brinsfield, for coming.

Dr. Gowadia, thank you so much for coming to my office and briefing me.

As you know, I represent the 11th Congressional District of New York, which encompasses New York City, and we face a persistent terrorist threat in our city. In fact, Commissioner Bratton of the

New York City Police Department stated that he believes that this time period is one of the most significantly dangerous periods since September 11, 2001.

The Domestic Nuclear Detection Office has worked closely with New York City in improving the ability for local law enforcement and public safety agencies to detect the transmission of nuclear and radiological materials through the Securing the Cities program. This program is viewed as one of the most successful and it allowed New York to dramatically improve its capabilities to secure existing radiological materials and increase its detection capabilities.

My question, because I know, Chairman, we might be called for votes any time now, I just have one question. With that in mind, how is the new office going to impact Securing the Cities program, and do you anticipate any changes or disruptions in that program?

Ms. GOWADIA. No, sir. Insofar as we are moving to the new office intact, we will continue our support for the Securing the Cities program, which has yielded tremendous results, as you know, not just in the New York City, Jersey City, and Newark region, but also in Los Angeles, right here in the National capital region, and very soon we will select our fourth implementation.

Mr. DONOVAN. Thank you.

Thank you, Mr. Chairman.

Mr. RATCLIFFE. I thank the gentleman.

The Chair now recognizes my friend and colleague from Rhode Island, Congressman Langevin, for 5 minutes.

Mr. LANGEVIN. Thank you, Mr. Chairman.

I want to thank our witnesses for being here today and your testimony.

One of the criteria that the CBRNE functions review measured against was to define clear roles and responsibilities for DHS HQ and operational components. However, listening to your testimony and reading the report, I'm not sure it's completely clear to me. So can you help me to understand what's unclear about the current roles and responsibilities and what would be different under the restructuring?

Ms. GOWADIA. Sir, under the new office, a lot of the authorities, in fact all the authorities off the various offices that are moving together would come together in the new office. Certainly, we have clear delineation for the work that operational components do and the work that we do within the headquarters function.

We envision the new office to be a mission support office. So we would get requirements from our operators in rad, nuke line and provide them capability. Dr. Brinsfield and her team would certainly give requirements to Dr. Brothers so that they could develop capabilities in support of the bio and chem mission.

So we do actually have fairly well-defined roles and responsibilities, and it should not see a disruption moving forward.

Dr. BRINSFIELD. It's our hope that it will be a one-stop shop, whether it be for an operational component of DHS or for State and locals looking for assistance in any of these areas.

Mr. LANGEVIN. We're confident that we're not going to be duplicating efforts? My question in follow-up would be, are there other

offices in DHS or in other agencies that operate in a similar fashion to the proposed CBRNE office?

Dr. BRINSFIELD. So there are other offices. We are specifically looking at this office encompassing the DHS mission and the DHS roles and responsibilities in the CBRNE space.

But I think it's also important to note when we work with the first responder communities, it behooves us, as Members of the Federal Government, to make sure we are coordinated well across the interagency. Therefore one of the things our offices strive to do is actually work towards common guidance and common information for first responders and State and locals in these areas.

Mr. LANGEVIN. I certainly hope when it moves forward that it is comprehensive, inclusive, and not duplicative.

The DHS Office of Policy serves as a central resource for DHS policy development and review. It's responsible for developing DHS-wide policies, programs, and planning. In the proposed reorganization, CBRNE-related policy positions would be transferred from the Office of Policy to the new office.

So what benefits does DHS expect to achieve from moving policy staff out of the Department-wide Policy Office and into a more narrowly-focused office?

Dr. BRINSFIELD. So I think the Policy staff that are currently on detail to OHA right now provide expertise in coordinating CBRNE policies across the Department. They have provided that expertise. We continue to coordinate well with them and make sure that they are well-coordinated with the subject-matter experts in both OHA and DNDO, and we hope to continue that.

It is also a critical need for us to make sure that their work in the CBRNE policy space continues to coordinate with big DHS Policy and that we as leaders in these areas continue to work across that.

Mr. LANGEVIN. How would policy staff in the new CBRNE office coordinate and integrate their decisions with those in the Department-wide Office of Policy? Also what factors make CBRNE policy different from the other topics that remain in the Office of Policy? Should policy positions in other topic areas also be decentralized throughout the Department?

Ms. GOWADIA. So the policy aspects, we have always worked very closely with our partners from Policy, whether they are detailed to OHA or resident up at the Office of Policy. We have enjoyed very good collaborations with them. They have provided for us Department-wide perspectives and allowed us to speak with a unified voice in the interagency and policy fora.

The CBRNE missions have a technical element to them. So sometimes it does help to have closer proximity for the policy people to the subject-matter experts. That is one advantage of having our policy partners sit closer to us.

Mr. LANGEVIN. All right. Thank you very much.

I'll yield back, Mr. Chairman.

Mr. RATCLIFFE. I thank the gentleman.

The Chair now recognizes the gentleman from Pennsylvania, Mr. Perry, for 5 minutes.

Mr. PERRY. Thank you, Mr. Chairman. Thank the panelists for taking the time to be here today. I think I'll turn to Dr. Brothers for the first question.

In addition to managing operational detection and surveillance programs for CBRNE threats, the role of DHS headquarters is to enable the operational components to achieve their missions. Can you tell us how your offices are engaging components such as CBP and TSA on these threats currently?

Mr. BROTHERS. Yes, I can. In fact, we're developing a structure, you may have heard. So under the Secretary's Unity of Effort initiative, we've developed a Joint Requirements Council, and under this Joint Requirements Council, we have a membership of cross principals of all the components that discuss issues around acquisitional requirements, et cetera. As part of that council, S&T plays a fundamental role in terms of looking at and evaluating technical issues, system engineering as well.

So I think with the Joint Requirements Council that that's a big picture on how we're developing requirements across the organization, but we're also about to set up IPTs, which are teams that are made up of the different components for us to get down go into what kind of research and development should be done across the Department.

So under the Secretary's Unity of Effort initiative, we are really pulling the Department together to, we want one organization to develop requirements and acquisition policies going forward.

Mr. PERRY. So from an operational standpoint for a layman or somebody that's, you know, not working there every day, can you kind-of describe—I understand the Joint Requirements Council and the IPTs, but operationally, like, what happens on a regular basis? How often do you get together once you determine actions and potential threats, and then who exactly is in charge?

Who do you report to, how often, and then how do you adjudicate the actions in the past through an after-action review process and then make modifications, if you know any of the answers? That was a few questions at one time, but—

Mr. BROTHERS. It's a few questions—right. I think from my perspective, the research and development perspective, our interaction with the operational components really is through the Joint Requirements Council, and we then are setting up structures where we actually interact on a daily basis with those operational components. That's a work in progress.

Mr. PERRY. But it's just from a research—

Mr. BROTHERS. From my perspective—

Mr. PERRY [continuing]. From your perspective.

Mr. BROTHERS. It's a research and development exercise, that's right. Now, S&T is also involved in the—we're getting more involved in the acquisition process in order to make sure the Department has a system engineering look at acquisitions going forward. So we're moving in there as well. I think perhaps Dr. Gowadia—

Mr. PERRY. Yeah, can you, if you can, and if you can answer those questions from a kind of a tactical standpoint, you know, event management.

How does it work? How does the current system work? Because I think the purpose—one of the purposes for the hearing is it seems

like it's—there's no point—there's no point to the spear. It's—there are many points to the spear, but who's coordinating the effort? How does that occur?

Ms. GOWADIA. All right. So I can speak to what we have done on the Rad and Nuke threat. First and foremost, we are an inter-agency office and we exchange detailees. So the operators sit with us and help shape our plans, help shape everything we do. Help even in the design of systems. We leave detail people out into the field so that scientists, technical personnel can get out and appreciate the operational world. It establishes a healthy tech pull, tech push.

In concert with Dr. Brother's office, we certainly try to build systems that are as multifunctional as possible, but we involve our end-users from start to finish. So whether it's analyzing the risk, understanding the threat, receiving their operational requirements, turning it into strategies testing the equipment out into the real world, once we buy and deploy these systems for them, we support them with alarm adjudication help if they need, training and exercises, et cetera.

So this whole loop does play through over and over again, and I can promise you I don't make a single investment decision without my operational components sitting right there at the table with the catcher's mitt ready to catch what we are building for them.

Mr. PERRY. But from a time frame, how often do you reevaluate your process?

Ms. GOWADIA. Annually, sir. We annually re-elicited the intelligence community. It forms a basis of our terrorism risk assessment. From that we are able to analyze what the blue team has, what the red team capabilities are likely to be, what our gaps and vulnerabilities are, and what our portfolio mix needs to be.

Much of our investment is based on this risk assessment. It is also coupled with technology maturity, what the operators really want and need, and how they will choose to use the systems in the field. So annually we sit down to go through our portfolio and every acquisition decision milestone we follow a very deliberate process that's reflective of the departments and the management directive 102-01 every milestone along the way. They sit with us as necessary, test with us constantly, sit with us to develop the strategies. So it's pretty much constant.

Mr. PERRY. Thank you. Mr. Chairman, I yield back.

Mr. RATCLIFFE. Thank the gentleman. The Chair now recognizes the Ranking Member, gentleman from Louisiana, Mr. Richmond.

Mr. RICHMOND. In an effort to finish before we have votes, and to keep you all for waiting for us to vote and come back, I will really just make a statement and hope that it's something we can all agree on.

To an answer to an earlier question, you mentioned that there really—this was a top-level decision and that the top-level people came together, and, you know, I just want to make sure this is not something that is a great idea in theory but in reality, for the people who have to implement it, it's not so manageable. So in recognizing that on the ground every day our nuclear deterrence and biodefense effort as a Nation depends on motivated and vigilant of-

ficers across the globe supplied with the best equipment and intelligence we can give them.

Officers working at our Nation's ports of entry have an especially complex and difficult job. Thousands of decisions are made every day all across our borders, ports, and airports to clear a container or a vehicle for transit into the United States. These are vital components in the flow of commerce in the world's premiere and largest trading market, the United States.

Other cargo requires further inspection or even denial of entry or interdiction action taken on a vehicle or person. That is the hard, cold, repetitive, and every-day reality of our mission to prevent a violent nuclear or chemical attack or a biological event or outbreak.

So I want to make it clear that we are very grateful to all of our dedicated men and women in the field who protect us from weapons of mass destruction on a daily basis and to make sure that they are involved in this process, to make sure that it's not just in theory that it's a great idea, but all the way to the bottom where our officers serve that they're also included and they make sure that they can do their goal and their tasks.

So with that, thank you all for coming, and, Mr. Chairman, I will yield back.

Mr. RATCLIFFE. Thank the gentleman. I thank all of you for being here for giving your testimony today. It's greatly appreciated. You all as a panel are dismissed.

The committee is going to recess for votes, and we'll reconvene immediately after the votes with apologies to the second panel for the inconvenience, but with appreciation for your indulgence. So we will recess to be back here in about 30 minutes. Thank you.

[Recess.]

Mr. RATCLIFFE. The Subcommittee on Cybersecurity, Infrastructure Protection, Security Technologies and Subcommittee on Emergency Preparedness, Response, and Communications will now reconvene and come to order.

At this time I would like to welcome our second panel to today's hearing. I very much appreciate your participation today and I, again, I appreciate your indulgence with the vote schedule, and we will have additional Members hopefully coming back here, but I've been given the green light to go ahead and start receiving your testimony.

So with that I would like to welcome the panel. With us today we have Mr. Alan Cohn, who's a principal at Steptoe & Johnson LLP. He is the former assistant secretary for strategy, planning, analysis, and risk at the U.S. Department of Homeland Security.

Mr. Ozzie Nelson is a senior associate for Homeland Security and Counterterrorism at the Center for Strategic and International Studies.

Mr. Warren Stern is a former director of the Department of Homeland Security's Domestic Nuclear Detection Office. Thank you all for being here today. Again, at this time I'd ask all of you to stand and raise your right hands, and I will swear you in.

[Witnesses sworn.]

Mr. RATCLIFFE. Let the record reflect that the witnesses have answered in the affirmative, and the witnesses' full written statements will appear in the record.

The Chair now recognizes Mr. Cohn for 5 minutes.

**STATEMENT OF ALAN D. COHN, COUNSEL, STEPTOE &
JOHNSON LLP**

Mr. COHN. Thank you. Chairman Ratcliffe, Ranking Member Richmond, distinguished Members of the subcommittees, thank you very much for the opportunity to present testimony today.

As you noted, you have my written testimony, so I'll just shortly summarize that briefly here.

As you noted, I served at the Department of Homeland Security for 9 years. Seven of that as the head of strategy. The last year dual-hatted as the Deputy Head of Policy. In that time I was privileged to work with several leadership teams, including multiple leaders of each of the organizations that you saw before.

I commend these subcommittees for ensuring continued focus on the question of the best approach to defending against weapons of mass destruction. As has been noted, biological threats and hazards and the use of an improvised nuclear device and the terrorist's use of explosives against transportation targets and mass gatherings remain among the threats, hazards, and persistent challenges that pose the most strategically significant risks to the Nation.

Having been at the Department for over 9 years before I left, I can say definitively that organizational changes are rarely the first solution or the most effective solution to any problem. That said, in this case, DHS is faced with the problem that its weapons of mass destruction leadership, its expertise, and its personnel, and resources are dispersed across numerous organizations just in its headquarters, let alone its operational components. That dispersal has resulted, as this committee has rightfully recognized, in unclear assignment of responsibilities and suboptimal engagement with Federal interagency partners, and with external partners. It has also contributed to less-than-effective oversight and execution of major acquisitions aimed at combatting weapons of mass destruction.

Three principles should guide any consideration of DHS functions—any consolidation of DHS functions and organizations. No. 1, there should be a single center of gravity within the Department's headquarters for any major function.

No. 2, headquarter's entities should perform the integrating functions necessary for the Department as a whole to be effective.

Third, operating entities should carry out operating responsibilities. For these reasons, I support the reorganization of the Department's headquarter's weapons of mass destruction's functions as the Department has proposed, but I would highlight two points.

First, the Department must go beyond placing the Domestic Nuclear Detection Office, the Office of Health Affairs, and the Office of Bombing Prevention into the same organization. Instead, it must fully integrate all of those functions to be transferred into the new offices. Each of these offices will perform certain functions well, but the Department will benefit most by taking the best practices of

each and adopting them across the CBRNE functions. So for that reason, I believe Congress should set the overall responsibilities and authorities for the new CBRNE office, but empower the Secretary to integrate the functions of the new office in the most effective manner possible.

Second, Congress must ensure that the Department effectively assesses its current models for CBRNE research and development and determines the best manner in which to pursue CBRNE programs and major acquisitions.

As you heard, DNDO, OHA use different models for their programmatic execution and for acquisition. Both of these models have achieved successes and both of these models have resulted in failure and termination of major acquisitions over time. It's difficult to say with certainty which of these models or a third model, is best suited to ensuring effective mission execution and guarding against the failure of major system acquisitions. However, that is an answerable question, and Congress and the Department should partner to actively seek that answer.

DHS has been traumatized in its short life-span by a series of reorganizations. However, that does not mean that the Department cannot benefit from a thoroughly-examined, well-considered reorganization and consolidation, particularly of its headquarters functions. In this case, the time has come for Congress and the Department to reorganize and consolidate its CBRNE headquarters functions to better effectuate the Department's CBRNE responsibilities.

Thank you again for the opportunity to provide this testimony, and I'm happy to answer any questions that you may have.

[The prepared statement of Mr. Cohn follows:]

PREPARED STATEMENT OF ALAN D. COHN

JULY 14, 2015

Chairs McSally and Ratchiffe, Ranking Members Payne and Richmond, distinguished Members, thank you very much for the opportunity to present testimony today regarding how the Department of Homeland Security can best organize itself to meet the challenge of weapons of mass destruction.

I commend these subcommittees for ensuring continued focus on the question of the best approach to defending against weapons of mass destruction. As a former first responder and official at the Department of Homeland Security, I know the challenges we face as a Nation in confronting this threat. While organizational change is rarely the first solution to a problem, in this case, the Department is rightfully examining the effectiveness of its organization with respect to this challenge. The Department's headquarters needs to be consolidated in many aspects, ensuring consolidation of similar headquarters functions and integration by the headquarters with respect to the Department's National responsibilities, while ensuring that the Department's operational components and its external operational partners—rather than the Department's headquarters—are entrusted with operations. To that end, I support the consolidation of DHS's headquarters weapons of mass destruction functions into a single office reporting to the Secretary of Homeland Security. A fuller explanation of these points follows.

While cyber threats, geopolitical conflicts, and instability and terrorism overseas have rightfully captured the interest and imagination of the American public and the media at this time, this committee has correctly ensured that we remain focused on the range of security challenges facing the United States. As stated in the report on the 2014 Quadrennial Homeland Security Review, biological threats and hazards, the use of an improvised nuclear device, and the terrorist use of explosives against transportation targets and mass gatherings remain among threats, hazards, and persistent challenges that pose the most strategically significant risks to the Nation. In addition, chemical weapons and accidents involving chemical facilities and chemi-

cals in transit, and radiological dispersal devices or “RDDs,” are risks that must continually be assessed and addressed.

I am currently of counsel with Steptoe & Johnson, LLP, the principal of my own consulting firm, and a non-resident senior fellow with the Brent Scowcroft Center for International Security at the Atlantic Council, focusing on issues at the intersection of security, technology, innovation, and government. I am proud to have served with the dedicated men and women of the Department of Homeland Security in the Department’s Office of Policy for 9 years, from 2006 to 2015, 7 of those as the head of strategy and strategic planning, the last 3 as assistant secretary for strategy, planning, analysis & risk, and the last year dual-hatted as the deputy head of policy for the Department. Before that, I practiced law, was a member of the Fairfax County Urban Search & Rescue Task Force and a disaster assistance employee for the Federal Emergency Management Agency’s urban search and rescue program, and served as an emergency medical technician for the 9–1–1 emergency ambulance system in New York City. I recognize the deep need for Congress and the Department to get its job done efficiently and effectively. This is important for the Nation, but also for the first responders across the country who rely on the Department for effective risk assessment, National strategy and policy, grants and grant guidance, scientific information, and protection, detection, and response and recovery equipment to supplement their own efforts and that of their departments and jurisdictions.

As noted above, organizational changes are rarely the first solution to any problem. However, in this case, the Department of Homeland Security does not lack for leadership, expertise, or dedicated personnel and resources focused on these challenges. Rather, the Department is faced with the problem of dispersing that leadership, expertise, and personnel and resources across numerous organizations just in its headquarters, let alone its operational components. That dispersal has resulted, as this committee has rightfully recognized, in unclear assignment of responsibilities and suboptimal engagement with Federal interagency partners and external stakeholders on weapons of mass destruction issues, and has contributed to less-than-effective oversight and execution of major acquisitions involving programs aimed at combatting weapons of mass destruction. This is not unique to weapons of mass destruction; the Department’s headquarters is in need of overall consolidation, and an overall sharpening of roles and lines of authority.

For that reason, Congress should be commended for directing, and the Department should be commended for conducting, a study of the Department’s organization with respect to its weapons of mass destruction functions, and for making difficult decisions that will require organizational transition and consolidation within the Department. During my time as an assistant secretary at the Department, I led portions of this review process, and helped facilitate discussions that resulted in the report that was provided to Congress by the Department. However, the views expressed today are my own, and are not intended to represent the Department of Homeland Security or the organizations with which I am currently associated.

I believe that there are three principles that should guide any organizational changes at the Department of Homeland Security, given the Department’s structure as a multi-divisional organization, a corporate form of organization in which semi-autonomous component entities perform interconnected functions and responsibilities, and where a headquarters exists to support the organization’s senior leadership in effectively integrate and optimize cross-Departmental activities and decision making in order to best meet the organizations overall goals and responsibilities.

1. *Consolidation.*—There should be a single center of gravity within the Department’s headquarters for any major function, whether in an integrated policy, management, or other directorate, or in a specialized office, recognizing that most if not all of the Department’s operating components will likely have a role in carrying out that function.

2. *Integration.*—Headquarters entities should perform the integrating functions necessary for a multi-divisional organization to be effective: Conducting risk assessments and associated analysis, leading to the development of integrated strategy and policy, against which research and development, programmatic activity, major acquisitions, joint operational planning, and joint operations can be conducted.

3. *Operations.*—Operating entities should carry out operational responsibilities, whether the Department’s own operating components or the myriad State, local, territorial, Tribal, private sector, non-governmental, and other partners with operational roles.

It goes without saying that any entity’s organization should be as lean as possible, with clearly delineated mission responsibility and authority, a clear leadership structure, effective recruiting, training, and retention programs, progressive oppor-

tunities for advancement into either leadership or senior technical positions, and a robust interchange of personnel and information between headquarters entities, the Department's operating components, and the Department's external stakeholders. This testimony assumes those steps will follow any reorganization of the Department's weapons of mass destruction functions.

With those elements as the backdrop, I believe that the time has come for the Department to undertake a reorganization of its weapons of mass destruction activities, with Congress's direction and authorization, to best serve its constituents and help safeguard the Nation. Specifically:

- Congress should authorize the consolidation of the functions currently performed by the Domestic Nuclear Detection Office, the Office of Health Affairs, and certain functions performed by the Science & Technology Directorate, the Office of Policy, the Office of Operations Coordination, and the National Protection and Programs Directorate to create a single office in the Department's headquarters, headed by an assistant secretary and reporting directly to the Secretary of Homeland Security, to best support the Department's responsibilities to combat chemical, biological, radiological, nuclear, and explosive (CBRNE) threats and hazards.
- Congress should ensure that this new office is clearly authorized and empowered to perform the range of headquarters functions associated with the Department's CBRNE responsibilities, to include effectively assessing CBRNE risk, formulating and communicating consistent and integrated Departmental CBRNE strategy and policy, ensuring effective oversight and execution of major CBRNE-related programs and acquisitions, communicating effectively with the Department's partners and stakeholders concerning CBRNE risks and the most effective ways to manage those risks, and enabling the Department's operational components to effectively carry out their CBRNE-related responsibilities.
- Congress should direct the Department to study, and should also direct an independent study, to determine the best model for integration of CBRNE-related research and development functions conducted by the Science & Technology Directorate with the functions to be performed by the new CBRNE office, and should revisit that issue once those studies have been completed.

The Department has now proposed many of these steps to Congress, so I will elaborate on two points: (1) The integration of CBRNE functions within a new CBRNE headquarters office; and (2) the process for determining the best model for integration of CBRNE-related research and development functions within the Department's headquarters.

First, the Department must go beyond placing the Domestic Nuclear Detection Office, the Office of Health Affairs, and the Office of Bombing Prevention into the same organization, and must fully integrate the functions to be transferred into the new office. Both the Domestic Nuclear Detection Office and the Office of Health Affairs perform certain functions well, but both could benefit from taking the best practices of each and adopting them across CBRNE functions. Moreover, the functions to be transferred from the Office of Policy and the Office of Operations Coordination, as well as the Office of Bombing Prevention, should be integrated in full into the new organization. Congress should set the overall responsibilities and authorities of the new CBRNE office, and empower the Secretary to integrate the functions to be incorporated into the new office to achieve the best effect across CBRNE functions, and not simply place the offices whole into what might be nothing more than a new shell organization.

Second, Congress must ensure that the Department effectively assesses its current models for CBRNE research and development, and determines the best manner in which to pursue CBRNE programs and major acquisitions. Currently, the Domestic Nuclear Detection Office uses a "systems command" approach, similar to Naval Sea Systems Command, performing "end-to-end" systems development including research and development. The Office of Health Affairs uses a model that separates research and development from programmatic execution and acquisition, with research and development functions performed by the Science & Technology Directorate. Both models have achieved successes, and both models have resulted in the failure and termination of major acquisitions. It is difficult to say with certainty which of these models, or a third model, is best suited to ensuring effective mission execution and guarding against the failure of major systems acquisitions. However, there is an answer to this question, and Congress and the Department should actively seek that answer.

For that reason, Congress should mandate that the Department assess the effectiveness of each of these models under the new organizational structure, perhaps on a yearly basis, until a specific date in the future, say 3 years from the creation

of the office. In addition, Congress should mandate that an independent study be conducted by an organization with familiarity with the different research and development models currently in use by the Domestic Nuclear Detection Office and the Office of Health Affairs, as well as those of other Federal departments and agencies and corporate entities, and make a recommendation to Congress and the Secretary as to the best model for the new CBRNE organization to employ. Congress can then revisit this last CBRNE-related organizational piece once both the Department and an independent organization have completed their review.

DHS has been traumatized in its short lifespan by a series of reorganizations. However, this does not mean that the Department cannot benefit from thoroughly-examined, well-considered reorganizations and consolidations, particularly of its headquarters functions. In this case, the time has come for Congress and the Department to reorganize and consolidate its CBRNE headquarters functions to better effectuate the Department's CBRNE responsibilities.

Thank you again for the opportunity to provide this testimony.

Mr. RATCLIFFE. Thank you, Mr. Cohn.

The Chair will now recognize Mr. Nelson for 5 minutes.

**STATEMENT OF RICK "OZZIE" NELSON, SENIOR ASSOCIATE,
HOMELAND SECURITY AND COUNTERTERRORISM PRO-
GRAM, CENTER FOR STRATEGIC AND INTERNATIONAL
STUDIES**

Mr. NELSON. Thank you. Good afternoon, Chairman Ratcliffe, McSally, Ranking Members Richmond and Payne, and distinguished Members of the subcommittee. Thank you for the opportunity to testify today.

As we've noted today, terrorist groups continue to pursue CBRNE weapons. For almost 20 years we have seen al-Qaeda and its affiliates pursue unconventional weapons. Most recently I've seen reports of ISIL seizing chemical weapons facilities and radioactive material in Iraq. Domestic efforts designed to detect and respond to a CBRNE incident are a critical component of our Nation's security, representing the last and perhaps the most vital line of defense against these weapons. No department has a greater role in this effort than the Department of Homeland Security.

While the Department has succeeded in building a number of offices, programs, and capabilities designed to detect and respond to CBRNE events, its effectiveness continues to be hampered by a variety of challenges. Primarily its fragmented organization and approach through which the Department executes its efforts.

Responsibility for CBRNE within the Department is spread across no fewer than six separate offices. This fragmented architecture demands unachievable levels of coordination and makes the implementation of common Department-wide policies and activities unnecessarily difficult.

Most U.S. Government departments and agencies, with the exception of DHS, have a streamlined approach to CBRNE with a central office that oversees WMD policy and programs. Not only does DHS continue to be the outlier with this fractured approach, but it has also resisted efforts to address this issue. The benefits of the Department for maintaining its current structure seem elusive. DNDO was created in 2005 as a stand-alone entity to focus Government efforts on the nuclear threat. While the office has succeeded in remaining focused, it has struggled to develop a strategic guidance and to manage large acquisition programs.

Recently DNDO has seen significant improvements efforts such as the Securing the Cities initiatives have flourished, and the orga-

nization's morale is the highest in the Department. However, issues still remain, many of which are beyond the control of the director. For example, the director of the science and technology maintains its own portfolio of nuclear radiological R&D programs which should fall under the purview of DNDO.

The other primary CBRNE entity within DHS is the Office of Health Affairs probably has suffered the most from DHS's fragmented approach. The Department's chemical and biological defense programs are tucked in the office whose primary responsibility is health and medical expertise. The relationship between chemical and biological threats in public health is clear, but they are by no means the same. This arrangement fails to recognize the nature of the treat and the organizational efforts required to address it.

The office's flagship program, BioWatch has been shrouded in controversy since its inception. In total, the Department has spent over \$1 billion on BioWatch, and it at best has provided questionable results. The Department's chemical defense efforts are similarly lackluster. They are severely fragmented and generally ineffective at least in part because the issues worked in various small offices spread throughout the Department.

While OHA retains the overarching responsibility, these other offices own key aspects of the chemical defense portfolio, making OHA's charter seemingly unmanageable. The Department and Congress must act now to address these shortcomings by unifying and elevating DHS CBRNE capabilities into one departmental entity. Specifically, DNDO and OHA should be merged along with the Department's CBRNE policy and operations capabilities. This new office should be headed by an assistant secretary who reports directly to the Secretary of Homeland Security.

The decentralized nature of CBRNE efforts within DHS has led to an equally decentralized system to develop associated technologies, which has contributed to many of the deficiencies in CBRNE and R&D and acquisition programs. As such, CBRNE, R&D efforts within DHS also should be unified under the centralized office. With responsibility for the Department's entire range of CBRNE efforts, the new entity would have the clear charter for establishing the Department's priorities.

Perhaps most importantly, the assistant secretary would solely be accountable for all CBRNE acquisition programs allowing for a more streamlined and agile approach that is directly connected to both policymakers and operators. It also would enhance external coordination issues by providing a primary entry point for outside entities seeking to coordinate with the Department on CBRNE issues.

The idea of consolidating DHS WMD efforts has long be discussed, and now is the time for action. We as a Nation have no excuse for not making this change as it will only improve the Department's ability to defend against the threat while eliminating redundancies. Through integration there exists an opportunity to forge more efficient and effective CBRNE enterprise and strengthen our Nation's security against these devastating weapons.

Thank you and I look forward to your questions.

[The prepared statement of Mr. Nelson follows:]

PREPARED STATEMENT OF RICK “OZZIE” NELSON

JULY 14, 2015

Good afternoon Chairmen McSally and Ratcliff, Ranking Members Richmond and Payne, and distinguished Members of the subcommittees. Thank you for the opportunity to testify today. I will be discussing how the Department of Homeland Security can be better organized to defend the United States against chemical, biological, radiological, or nuclear (CBRNE) weapons. I am here today under my CSIS affiliation however I am also employed by Crossmatch Technologies, an identity management company, as well as Georgetown University where I teach classes on Homeland Security and Counterterrorism as part of the Biohazardous Threat Agents and Emerging Infectious Disease Program within the Microbiology and Immunology Department.

THE THREAT

In the midst of a seemingly perpetual terrorism threat and a time of constrained fiscal resources, the United States Government faces difficult questions regarding how to best prepare for National security threats that may be viewed as relatively unlikely or low probability yet could have potentially devastating consequences, specifically the use CBRNE weapons on American soil. Though they may require comparatively more time and skill to build or acquire than conventional weapons, the proportional effects of CBRNE weapons are significantly greater. The “Amerithrax” attacks of 2001, for example, involved only a small amount of anthrax yet succeeded in paralyzing portions of the U.S. Government. And the consequences of a terrorist group detonating a low-yield nuclear weapon in a major U.S. city would change America forever. Although the probability of terrorists using simpler means—such as mass shootings—to strike the United States appears much higher, the impact of a successful CBRNE attack demands that the Nation prioritize and resource this threat.

Terrorist groups continue to pursue CBRNE weapons, despite the challenges they face developing these capabilities, at least in part because they can provide these terrorists with a disproportionate level of power, and even prestige, relative to their actual capabilities or standing. For almost 20 years, we have seen al-Qaeda and its affiliates pursue unconventional weapons. Osama bin Laden in 1998 declared that acquiring and using a weapon of mass destruction (WMD)¹ was his Islamic duty. More recently we have seen reports of the Islamic State of Iraq and the Levant (ISIL) seizing chemical weapons facilities and radioactive material in Iraq. Deterrence strategies have no effect against these enemies—If they acquire a WMD then we should expect them to use it.

These types of weapons are game-changers for a terrorist group, and we should expect such groups to pursue these capabilities with continued vigor. While 30 years ago, state-level WMD programs were far and away our primary concern, the rapid spread of technology and increasing availability of information on the internet has made the development of such weapons simpler for terrorist groups by further lowering the barriers to development of CBRNE capabilities. Further, instability in nations that possess CBRNE weapons, such as Syria and Pakistan, raises the risk of existing stockpiles falling into dangerous hands. Faced with these threats, the United States has little choice but to work to defend itself against CBRNE weapons.

THE CHALLENGE

Since 9/11 the United States has developed a robust series of measures intended to counter CBRNE weapons at multiple points before they reach U.S. shores. Yet these efforts continue to fall short. The Bipartisan WMD Terrorism Research Center in its 2011 Bio Response Report Card gave the Federal Government failing grades in its assessment of the Nation’s ability to respond to a large-scale bioterrorism event. This report is only one of many that indicates the Federal Government writ large has failed to posture itself to adequately detect and disrupt CBRNE threats or incidents. And ultimately, regardless of Governmental efforts at any level, the possibility always will remain that a device or agent could evade detection or even be manufactured within the United States itself. As such domestic efforts designed to detect and respond to a CBRNE incident are a critical component of the Nation’s security, representing the last and perhaps most vital line of defense against these weapons.

¹For the purposes of this testimony CBRNE and WMD are used interchangeably.

No department has a greater role in this effort than the Department of Homeland Security. While the Department has succeeded in building a number of individual offices, programs, and capabilities designed to detect and respond to CBRNE events, its effectiveness continues to be hampered by a variety of challenges. First among these is simple but critical—the fragmented organization and approach through which the Department executes its CBRNE efforts. Currently responsibility for various elements of CBRNE detection and response within the Department is spread across no fewer than six separate offices including the Domestic Nuclear Detection Office (DNDO), the Office of Health Affairs (OHA), the Office of Policy, the Office of Operations Coordination, the Science and Technology Directorate, and the National Protection and Programs Directorate (NPPD). This fragmented architecture demands unachievable levels of coordination and cooperation, and makes the implementation of common, Department-wide policy and activities unwieldy and difficult. Moreover it runs contrary to the Department's program to improve Department-wide unity of effort.

While organizational dynamics may seem trivial they are critically important when countering such complex threats as terrorism and CBRNE. The National Commission on Terrorist Attacks Upon the United States—the 9/11 Commission—presents a scathing critique of U.S. Government inter-departmental coordination. More recently the 2008 Commission on the Prevention of Weapons of Mass Destruction Proliferation and Terrorism, cited inefficient Government organization as a serious problem—with dozens of overlapping offices and officials responsible for addressing CBRNE issues.

The challenge of coordinating CBRNE detection and response is significant. Not only must Federal agencies coordinate across the Government but also with State and local governments, who likely will be the first responders in such an event, and with industry and academia, who provide valuable research and development (R&D) and other technical support. Such coordination requires that department and agencies be unified and well-coordinated internally. Without effective internal coordination, departments and agencies cannot expect to succeed with external coordination.

Most departments and agencies, with the exception of DHS, have a streamlined approach to CBRNE with a central office that oversees WMD policy and programs. These entities, among others, include the Department of Defense's Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs, the Department of State's Assistant Secretary of State for International Security and Non-proliferation, and the Federal Bureau of Investigation's Weapons of Mass Destruction Directorate. The unity and strength of these elements with their clear assignment of responsibilities and clean lines of communication has enabled these organizations to effectively coordinate internally within their agencies and external with the interagency.

Not only does DHS continue to be the outlier with its fractured approach to CBRNE but it also, for unknown reasons, has resisted—or just simply failed to prioritize—efforts to correct the issue. In the fiscal year 2013 Homeland Security Appropriations Act the Secretary of Homeland Security was tasked by the Congress to review the Department's WMD coordinating mechanisms and provide recommendations by September 1, 2013. Yet the Department failed to respond to this request until June 2015—almost 2 years later.

The benefits to the Department for maintaining its current structure seem elusive. DNDO was created in 2005 as a separate, stand-alone entity to focus Government and DHS efforts on the nuclear threat. While the office has succeeded in remaining focused it has struggled to develop strategic guidance and direction and to manage large acquisition programs. The Global Nuclear Detection Architecture—a framework for detecting, analyzing, and reporting on nuclear and other radioactive materials—has floundered, and hundreds of millions of dollars have been wasted on radiation detection programs that have fallen well short of expectations, such as the Advanced Spectroscopic Portal (ASP) and the Cargo Advanced Automated Radiography Systems (CAARS).

Recently under the leadership of Director Huban Gowadia DNDO has seen significant improvement. Efforts such as the Securing the Cities initiative—a program to assist States in establishing capabilities to detect radiological and nuclear materials in major cities—have flourished, and the organization's morale is the highest in the Department.² However, issues still remain, many of which are beyond the control of the director. For example the Directorate of Science and Technology, with a lackluster record of coordinating effectively within the Department, maintains its own portfolio of nuclear and radiological R&D programs that arguably should fall under the purview of DNDO. Additionally key nuclear/radiological policy and operations

²<http://bestplacetowork.org/BPTW/rankings/overall/sub>.

elements reside within other DHS directorates detached from DNDO. While Dr. Gowadia's strong leadership and vision have improved DNDO, the organization's efficacy cannot be dependent upon personality or leadership alone. It must be strong enough not only to stand on its own merit but also to execute its charter both inside and outside of the Department.

The other primary CBRNE entity within DHS, the Office of Health Affairs (OHA), probably has suffered most from DHS's fragmented approach. The Department's chemical and biological defense programs are tucked into the office whose primary responsibility is "health and medical expertise." The relationship between chemical and biological threats and public health is clear—but they are by no means the same. Having chemical and biological programs as a subset of public health fails to recognize the nature of the threat and the organizational efforts required to address it, which can be seen in OHA's execution of its programs.

The office's flagship program, BioWatch, which aims to detect the presence of high-risk biological agents, has been shrouded in controversy since its inception. In 2011 the National Academy of Sciences questioned the effectiveness of the currently deployed Generation Two (Gen-2) system. Last year the Department cancelled the acquisition of the next generation biosurveillance technology (Gen-3), which was to replace the fielded Gen-2 systems. The program was moved from OHA back to S&T for further development. The Government Accountability Office (GAO) identified a number of deficiencies with the Department's management of the Gen-3 program noting that the Department failed to conduct sound mission needs analysis and to follow good acquisition processes. In total, the Department has spent over \$1 billion on BioWatch and has at best provided questionable results. Over \$150 million was spent on the Gen-3 technology alone before it was cancelled.

The Department's chemical defense efforts are similarly lackluster. They are severely fragmented and generally ineffective at least in part because the issue is worked in various, small offices spread throughout the Department. While OHA retains the overarching responsibility, these other offices own key aspects of the chemical defense portfolio. The Chemical Facility Anti-Terrorism Standards program, which regulates high-risk chemical facilities, is managed by NPPD. And the Chemical Security Analysis Center (CSAC), which assesses chemical threats and vulnerabilities, is led by the S&T office. With a variety of disparate chemical programs spread throughout component agencies, OHA's chemical defense charter is seemingly unmanageable.

DHS' fractured approach to CBRNE has resulted in inefficient operations, insufficient accountability, and wasted taxpayer dollars, ultimately increasing the risk to the American homeland. Fortunately, many of these shortcomings can be addressed simply by reorganizing and elevating the Department's CBRNE efforts into single, consolidated entity. Such an approach will make it possible for the Department to have a focused CBRNE detection and response capability with clear roles and responsibilities in order to improve reaction times and accountability, and eliminate redundancy and inefficiencies.

THE SOLUTION

The Department and Congress must act now to address these shortcomings by unifying and elevating DHS's CBRNE capabilities into one Departmental entity. Specifically DNDO and OHA should be merged along with the CBRNE policy and operations capabilities and the NPPD Office of Bombing Prevention. The new office should be headed by an assistant secretary who reports directly to the Secretary of Homeland Security. The Department also should align R&D programs under this new office. Given that CBRNE detection and response is inherently a technology-intensive venture, there are numerous challenges associated developing and acquiring the needed technologies. The decentralized nature of CBRNE efforts within DHS has led to an equally decentralized system to develop associated technologies, which has contributed to many of the deficiencies in DHS CBRNE R&D and acquisition programs. To increase both the tactical and strategic integration of the CBRNE detection and response, the new consolidated enterprise must focus on both policy and technology. As such, CBRNE R&D efforts within DHS also should be unified under this centralized office.

The consolidated office also would be able to provide a holistic approach to the Department's WMD programs and eliminate duplication of efforts. With responsibility and visibility into the Department's entire range of CBRNE efforts from policy to technology to operations the merged entity would ensure continuity and effective prioritization of this highly complex threat. Moreover the experiences of the Department's entire WMD expertise could be leverage on a routine and daily basis. The new entity would have the clear charter for establishing and articulating the De-

partment's CBRNE priorities and strategies to both internal and external audiences. Perhaps most importantly the assistant secretary would be solely responsible and accountable for all CBRNE acquisition programs allowing for a more streamlined and agile approach that is directly connected to both policy-makers and operators.

In addition to raising the profile and priority of CBRNE in the Department, and consolidating capabilities and eliminating overlap, the new entity would enhance external coordination by providing a primary entry point for outside agencies and entities seeking to coordinate on CBRNE issues with DHS. In today's security environment there are very few single agency threats and there are even fewer single agency solutions. This is especially true with CBRNE where coordination between Federal, State/local, academia, and the private sector is an absolute necessity. Under the current DHS structure it is uncertain as to who in the Department has the lead for CBRNE efforts and at what moment in the process.

Interagency or inter-departmental coordination is critical when dealing with complex transnational threats such as CBRNE. In interagency meetings, including at the National Security Council level, each Department normally gets a single seat at the table. Individuals that are knowledgeable in a broad range of topics, yet still technically conversant, often prove to be the most effective participants in these policy discussions. Regarding CBRNE, departments must have a cadre of individuals who can speak with one voice on the whole of the issues. With DHS's expertise currently stove-piped into disparate parts of the organization, they lack a robust group of individuals that has the responsibility and authority to speak to the whole of their efforts against CBRNE threats.

The consolidated entity also would serve as the home base for all DHS CBRNE personnel allowing them to benefit from each other's background and experience not only in technology but also in management and acquisition programs. A larger, consolidated cadre of talent also would provide DHS CBRNE professionals with greater career opportunities and positions for growth. By raising the profile of CBRNE within the Department and the interagency, and leveraging the recent leadership efforts in DNDO that have resulted in such high morale, DHS CBRNE could become one of the most sought-after places to work for WMD professionals. Instead of internal components competing against one another for prioritization and resources they could be working together for mutual and greater benefit.

CONCLUSION

DNDO and OHA have struggled with effectively communicating and facilitating a common understanding of the Department's CBRNE efforts and have ineffectively managed major CBRNE acquisitions. The idea of consolidating DHS WMD efforts has long been discussed, and now is the time for action. We as a Nation have no excuse for not making this change as it will only improve the Department's ability to defend against the WMD threat while eliminating redundancies and inefficiencies. The current model is also inconsistent with the Department's Unity of Effort initiatives. There is simply no reason to maintain the current structure. Ultimately, there is no consolidated, single architecture that would perfectly address the multitude of challenges associated with CBRNE detection and response. However, the various offices, programs, and capabilities currently spread across the Department can and should be integrated. Through integration, there exists an opportunity to forge a more efficient and effective CBRNE detection and response enterprise and strengthen our Nation's security against these devastating weapons.

Mr. RATCLIFFE. Thank you, Mr. Nelson.

The Chair now recognizes Mr. Stern for 5 minutes.

STATEMENT OF WARREN STERN, FORMER DIRECTOR, DOMESTIC NUCLEAR DETECTION OFFICE, U.S. DEPARTMENT OF HOMELAND SECURITY

Mr. STERN. Good afternoon, Chairman Ratcliffe, Chairman McSally, Ranking Member Richmond, Ranking Member Payne, and distinguished Members of the subcommittee.

I'm pleased to testify today about the Department of Homeland Security plan to establish an office responsible for chemical, biological, radiological, nuclear, and explosive threats. I am currently the R&D manager at Brookhaven National Laboratory. However, I'm

not here today as a Brookhaven employee. I am here as an individual to provide testimony based on my experience in this field.

From 2010 through 2012, I was the director of DNDO. I have also worked in related U.S. Government positions over 25 years, and have been part of several Government reorganizations. I draw my insights from these experiences.

In general, I favor the creation of a weapons of mass destruction organization within DHS. Weapons of mass destruction threats, which are exceedingly infrequent, can be easily forgotten in the day-to-day work of Government agencies. A strong organization focused on the work necessary to prevent and respond to events of low frequency but very high consequence is necessary to prevent a terrorist attack using weapons of mass destruction in the United States. However, I also believe that a reorganization of the scale and scope being considered by the subcommittee would be a significant—would be significantly disruptive to the work of the those involved. This does not mean that a reorganization should not be pursued. It simply means that such reorganization should only be pursued if the benefits significantly outweigh the costs. If there is a clear objective, and if Congress and the administration have the willingness and the ability to devote the resources needed to ensure the objectives will be met.

If a reorganization is to be done, it should be done to make a substantially stronger organization. Reorganization should not be pursued simply to make a cleaner organizational chart. While DNDO has had difficult periods in its relationship with Congress, I believe that when I left DNDO, Congress was generally pleased with and supportive of its work. I also believe that under the current leadership this is still true, and I've heard that today also.

As such, as Congress considers any reorganization plan, it should consider which specific problems with respect to DNDO it is trying to fix, as DNDO will be the largest part of the new CBRNE unit. Within the context of these cautions, I'd like to highlight three specific points regarding the specific reorganization plan presented by the administration.

The first is at the bureaucratic level. The proposed structure would place each of the functional units, nuclear, chemical, biological, explosive, below an assistant secretary. This would mean that the head of all nuclear functions would no longer have a direct link to the Secretary and would become the equivalent of a deputy assistant secretary or an office head. This structure has the potential to diminish rather than to strengthen the role of DNDO.

For example, when I started at DNDO, one of the main Congressional criticisms was that the organization had not been able to create a Government-wide strategic plan for the global nuclear detection architecture. Within 3 months we were able to create such a plan. The plan reflected the hard work, insights, dedication, and diplomatic skills of the DNDO's many employees. However, it is clear to me that this could not have been done if it had not been for my ability to reach out to assistant secretaries in other agencies as an equal partner and to have a direct line to the Secretary to call upon when there were problems.

My second specific comment relates to the functions of the new office. DNDO has a narrowly-defined function, nuclear detection

and nuclear forensics. This allows the office to do what it does well. The DHS plan suggests that the new office would address a much broader span of nuclear topics. The subcommittee should recognize that this would have a fundamental and transformative effect on DNDO.

My final point relates to this change in scope. The DHS plan notes that the expansion in DNDO's mission would be accomplished by the inclusion of CBRNE policy and operational support personnel within the new CBRNE unit. The shift in personnel into the new nuclear organization appears quite small, perhaps a few people. It in no way reflects a fundamental shift in the scope of the organization. I urge that the actual scope of the new office be clear, carefully considered, and related to the manpower it needs for each of the new areas to be included in DNDO's mandate.

In conclusion, I would once again like to thank the subcommittee for the opportunity to testify today, and to emphasize that if a CBRNE organization is going to be created in DHS, it should be created in a way that makes its constituent parts stronger than they are today. I appreciate your consideration of this issue, and am happy to answer any questions. Thank you.

[The prepared statement of Mr. Stern follows:]

PREPARED STATEMENT OF WARREN STERN

JUNE 14, 2015

Good afternoon Chairman Ratcliffe, Chairman McSally, Ranking Member Richmond, Ranking Member Payne, and distinguished Members of the subcommittee. I am pleased to testify today about the Department of Homeland Security's plan to establish a central headquarters office responsible for chemical, biological, radiological, nuclear, and explosives (CBRNE) threats.

I am currently senior advisor and R&D manager at Brookhaven National Laboratory. However, I am not here today as a Brookhaven employee or representative of Brookhaven or the Department of Energy. Rather, I am here as an individual, to provide testimony based on my experience in this field. The views I express today are my own. Furthermore, I am not being reimbursed by my employer for the time or expense incurred by this testimony.

From 2010 through 2012, I was the director of DHS's Domestic Nuclear Detection Office. This is the office that would comprise the largest part of the new CBRNE office being considered by the subcommittees. I have worked in other related U.S. Government positions over a 25-year career and have been part of several Government reorganizations. I draw my insights from these experiences.

At the outset, I would like to be clear that, in general, I favor the creation of a strong WMD organization within DHS. DHS focuses its efforts on threats that manifest themselves frequently. WMD threats, which are exceedingly infrequent, can easily be forgotten in the day-to-day work of Government agencies. A strong organization focused on the work necessary to prevent and respond to events of very low frequency but very high consequence is necessary to prevent a terrorist attack using WMD.

I believe that a reorganization of the scale and scope being considered by the subcommittees would be significantly disruptive to the work of those involved. This is not unique to DHS. It is simply what happens during any large-scale reorganization. There are winners and losers; civil servants and others will spend time wondering what will happen to them and debating the details of the new structure. A reorganization such as this will set the organization back for a time as the new structure transitions.

This does not mean that reorganizations should not be pursued; it simply means that such reorganizations should only be pursued if the benefits outweigh the costs, if there is a clear objective, and if Congress and the administration have the willingness and ability to devote the resources needed to ensure the objective will be met.

DNDO and OHA are two of the smallest components in DHS, and some have argued that the two should be consolidated to make a more streamlined structure at DHS. In my opinion, the Secretary's office does have too many direct reports. How-

ever, because of the costs involved in reorganization, reorganization should not be pursued simply to make a cleaner organization chart.

Some assert that reorganization should be pursued to reduce costs. However, while DNDO and OHA work cooperatively when there is a common issue, the missions of DNDO and OHA are very different. Nuclear detection and monitoring and response to biological threats are distinct disciplines. While there may be small administrative savings in combining the two, it is hard for me to imagine that the benefits would be significant enough to justify the costs of reorganization. If reorganization is going to be done, it should be done well and done for the right reason: To make a substantially stronger organization.

DNDO is a unique interagency organization, as it is focused on two main areas of nuclear terrorism prevention: Nuclear detection and nuclear forensics. DNDO works with Federal, State, local, Tribal, territorial, international, and private-sector partners to fulfill its mission. It works in coordination with partners from across the U.S. Government (USG), including DHS components, the Departments of Energy (DOE), State (DOS), Defense (DOD), Justice (DOJ), the intelligence community, and the Nuclear Regulatory Commission.

DNDO develops the Global Nuclear Detection Architecture (GNDA) and implements the domestic component of the architecture. DNDO also works with its partners to coordinate interagency efforts to develop technical nuclear detection capabilities, measure detector system performance, ensure effective response to detection alarms, integrate USG nuclear forensics efforts, and conduct transformational research and development for advanced detection and forensics technologies. DNDO is charged with being the primary Government entity to develop, acquire, and support the deployment of an enhanced domestic system to detect and report on attempts to import, possess, store, transport, or use a nuclear explosive device or unauthorized radiological material in the United States.

While DNDO has had difficult periods in its relationship with Congress, primarily surrounding the work related to the Advanced Spectroscopic Portal (ASP) and its lack of a strategic plan, I believe that when I left DNDO, Congress was generally pleased with and supportive of its work. I also believe that, under its current leadership, this is still true. As such, as Congress considers any reorganization plan, it should consider what specific problem with respect to DNDO it is trying to fix, as DNDO will be the largest part of the new CBRNE unit.

Within the context of the above cautions, I would like to highlight three specific issues on the reorganization plan presented in the "DHS Chemical, Biological, Radiological and Nuclear Functions Report."

The first is the bureaucratic level of the CBRNE office and its units. The proposed structure would place each of the functional units (nuclear, chemical, biological) below an assistant secretary who would be responsible for all of the units and overall CBRNE policy. This would mean that the head of all nuclear functions would no longer have a direct link to the Secretary and deputy secretary and would become the equivalent of a deputy assistant secretary. Presumably, managers below the new nuclear head would become the equivalent of office directors or team leaders.

This structure has the potential to diminish rather than strengthen the function of DNDO. Interagency relationships are at the heart of DNDO's work. Stepping down the level of the director and those below her could impact the effectiveness and efficiency of DNDO.

For example, when I started at DNDO, one of the main Congressional criticisms of DNDO was that the organization had not been able to create a Government-wide strategic plan for the GNDA, despite a strong recommendation from Congress to do so. I agreed with Congress that such a plan was necessary and was determined to create such a plan. Creating any plan across the five or six relevant Departments with overlapping responsibilities is an extremely complex task, and my first step was to appeal to my counterparts in the other agencies to personally ask for their help in creating this strategic plan. I asked each of my counterparts at the assistant secretary to show flexibility and consider overriding obstruction by lower-level officials in their organizations if necessary. My next step was to explain to the Secretary and deputy secretary that I needed their help managing the interagency and, more importantly, in managing the larger components within DHS.

Within 3 months, we were able to create the first GNDA strategic plan and deliver it to Congress with concurrence and input from the White House and all relevant agencies. To be clear, the plan reflected the hard work, insights, dedication and diplomatic skills of DNDO's many talented employees. However, it is also clear to me that this could not have been done if I had not been able to reach directly out to my interagency counterparts at the assistant secretary level to resolve problems and directly leverage the Secretary's office.

My second specific comment relates to the function of the new office. As I mentioned earlier, DNDO has a narrowly-defined function—nuclear detection and forensics—and that limitedness has both positive and negative elements. On the positive side, it allows the office to do what it does well. There are several places in the Government that work on nuclear detection, but no other agency or department covers the detection field so comprehensively or competently, from R&D and testing to acquisition and architecture.

On the other hand, detection and forensics is only a slice of U.S. efforts to prevent a nuclear or radiological terrorism. The DHS plan suggests that the new structure offers the opportunity for the nuclear office to more robustly address the span of nuclear topics, to include prevention, protection, response, mitigation, or recovery. The subcommittee should recognize this relatively small part of DHS's plan could have a fundamental and transformative effect on the work of DNDO.

My final point is related to the change in scope. The DHS plan notes that the expansion in DNDO's mission would be accomplished in two ways: By inclusion of CBRNE policy and operational support personnel within the new CBRNE office and by establishing strong linkages between the CBRNE office and a new DHS Joint Requirements Joint Operational Plans Process. To me, this seems wholly inadequate given the potential scope of the new organization. The shift in personnel into the new nuclear organization appears quite small, perhaps a few people, and it in no way reflects the fundamental shift in scope of the organization.

Indeed, even with the shift, important elements of the CBRNE mission will remain in other parts of DHS. For example, the Federal Emergency Management Agency (FEMA) and National Protection and Programs Directorate (NPPD) will retain key nuclear missions and personnel that appear to be within the new scope of the nuclear part of the new CBRNE office. I urge that the actual scope of the new office be clear, carefully considered, and related to manpower needs for each of the new areas to be included in DNDO's new mandate, which could be substantial.

In conclusion, I would once again like to thank the subcommittees for the opportunity to testify today and to emphasize that if a CBRN organization is going to be created in DHS, it should be created in a way that makes its constituents—in particular DNDO—stronger than they are today. I appreciate your careful consideration of this issue and am happy to answer any questions.

Mr. RATCLIFFE. Thank you, Mr. Stern.

I'd now like to recognize the gentlelady from Arizona, Congresswoman McSally for 5 minutes.

Ms. MCSALLY. Thank you, gentlemen. I really appreciate your testimony today and your experience as outsiders but also former insiders, in some cases, on what's the best way for us to be combating these threats. I agree with you, I spent 26 years in the military, I said this to the last panel, I've reorganized for reorganizing sake or been a part of those in the past. Managing change is something that is, you know, sometimes doesn't end up with a better result. So, I mean, I appreciate your perspectives on that, Mr. Cohn, and, Mr. Stern, especially your comments on that.

So can we talk a little bit more about that? Just elaborate a little bit on your perspectives of how you think this change would be managed. I hear you say it needs to happen, and so how do you think it would be managed so it is for the good and it isn't like a bureaucracy that then resists the change and ends up less capable to actually address the issue that we were trying to do because bureaucracies have an ability to resist change.

So just wondering about your perspectives, and also, Mr. Stern, having been there on if this is, you know, the right thing to do, how that should be managed so that we don't have a dip. Because sometimes there's a dipping capability as you're moving to a new order, and what you think we can learn from your insights on how to do it well if it goes into force?

Mr. COHN. So I think the most important thing in any organization, whether you're leading as it is or reorganizing it is a clear

sense of mission, strong leadership who are empowered to carry out that mission, and a workforce that clearly understands what is expected of it in that new organization.

So I think that the most important pieces—and so in this way I agree with Warren that the reorganization should not be undertaken for reorganization's sakes. But the Department has set out some key reasons why the reorganization needs to take place. People within the Department and outside the Department need to know where they go for this source of expertise, people within and outside of the Department, and that may be its operating components down to the individual CBP Officers or others, as Ranking Member Richmond has mentioned. Whether that is State and local officials from Texas or Arizona or Louisiana or wherever they are, or from the Federal interagency to be able to have one place to go. As was pointed out, that there is one official who is accountable for making decisions based on risk across these entities.

So I think that it's imperative in this reorganization, and Congress has the opportunity to clearly set the mission, clearly set the authorities, and clearly direct the new office in a task to carry out the Department's National and overall responsibilities in an integrated way.

Ms. MCSALLY. Mr. Stern, you got any perspective?

Mr. STERN. Yeah. So I think the most important thing, assuming a transition is going to occur, is to ensure that the objectives which Mr. Cohn mentioned are linked to the means. That it's clear to the individuals involved how this change relates to those objectives.

So, for example, if the objective is to strengthen the organization, then presumably there should be an elaboration of how this strengthens the organization and how the individuals in the existing units fit into that strengthened organization, and although the administration or the DHS plan is not very detailed, understandably at this point, I think at some point before Congress approves of this it should be well explained and it should be explained to the staff.

The other thing that I would suggest in order to ensure that it's not too disruptive is to ensure that in DNDO's case that it moves as a unit. For example, I think there's been discussion of moving the R&D part of DNDO, and that was in play when I was director also, and I fought strongly against it. DNDO acts as a unit and acts together and is structured that way, and the objective would be to minimize that transition in the creation of this new organization.

Ms. MCSALLY. Great. Thanks. I heard you talking about, and I totally agree, if people don't know who to call, if there's not one place or somebody who's responsible at the right level, then that can be confusing both within the Department and the interagency and then with us. But having an assistant secretary as an answer, we're marking up a bill later this week to create potentially another assistant secretary about countering violent extremism.

So how many direct reports—or how many assistant secretaries will there be when we're done with this, and is there a down side as we try and elevate those many different missions that it—you know, that we have too many chiefs and not enough Indians, so to speak, you know, just to use that example.

Mr. COHN. My experience in the Department is that when an office like this is created, it's not at the diminution of the sub offices that are incorporated, but rather when you have heads of individual offices all reporting to the Secretary, it diminishes the impact that any one of them has. So in this case you are taking two direct reports and pieces of other entities and combining them into a single organization with a single leader at a level of stature who can then have the level of impact directly with the Secretary, the deputy secretary, and the Department's leadership that you would want for this function.

Ms. MCSALLY. Great. Thanks. My time's expired. Thanks, Mr. Chairman, for yielding to me so I can go to the floor and talk about National security. Another important issue.

Mr. RATCLIFFE. I thank the gentlelady for yielding back, and the Chair now recognizes the Ranking Member of the Subcommittee on Cybersecurity, Infrastructure Protection, and Security Technologies, the gentleman from Louisiana, Mr. Richmond.

Mr. RICHMOND. I guess I'll start with Mr. Stern, because I think you touched on it a little bit, and then as Mr. Nelson and Mr. Cohn want to chime in, you're more than welcome.

I'm trying to get a feel for what extent you think the proposed consolidation represents a departure from existing technologies acquisition review processes for each office or component. Let me give you an example. Would you recommend that the newly-minted assistant secretary scrutinize current activities and re-assess or re-prioritize their relevance or need? Second, how would you form a CBRNE office? Feel free to take a minute to expand on a your thoughts too.

Mr. STERN. Yeah, thank you. Following in answering this question and following on the last answer, the consolidation within DHS and removing direct reports from the Secretary doesn't necessarily require the diminution of the directors below the assistant secretary level. So now you'll have an assistant secretary and/or some perhaps under secretary with several independent yet cooperative elements below it.

It doesn't fundamentally affect the way acquisition is done, although it provides the opportunity for joint acquisitions between the different components within this new CBRNE unit. So it has the potential to improve acquisition processes, but that can't be taken as a foregone conclusion.

Mr. NELSON. To the earlier point as well, we could make it an under secretary as well. I think the Department's probably short two under secretaries to begin with, and raise them up. Again, not all departments are going to be equal either. All assistant secretaries wherever we are regarding Government aren't weighed.

But as far as the acquisition, I think having that one individual that is responsible for these complex—technically complex acquisition programs, having that charter is critically important. Right now, as I said in my comments, the acquisition in the R&D is so fragmented throughout the Department and agency, and with these programs moving through the system and exchanging hands, there's really no one to go to and say: Okay. Who is ultimately responsible for X, Y, and Z, and who's following it through? That's what that under secretary—assistant secretary is going to give you,

the single belly button that is oversight inside the Department and oversight to you here in Congress.

Mr. COHN. I think that this is a departure from the way that the Department is currently operating, and that is for the better. I think it is an opportunity to combine the best of what you heard from each of the three panelists on the first panel.

No reorganization, as Mr. Nelson said, change—or Mr. Stern said—changes acquisition oversight or other things automatically. It simply sets the conditions for that. But this type of integration allows you to take that focus that Dr. Gowadia spoke of and expand it across the CBRNE space.

It allows you to take the risk-oriented approach that Dr. Brinsfield noted, invest the assistant secretary with the ability to look across this portfolio and make decisions based on risk in consultation with and in service to, the Department and its external stakeholders. It gives the assistant secretary in the office the opportunity to take that integrated view that Dr. Brothers said was so important, especially when you're dealing with technical subjects.

Mr. RICHMOND. As they embark on this creation and, really, the goal of getting unity of effort, and you talk about focus, what would your advice be in terms of the maybe not so obvious but pitfalls that may be in there or unintended consequences that you would want to give just a heads-up that they should look for? We can start in same order. Fine with me.

Mr. NELSON. Sorry. I apologize for interrupting. I would say, somebody's mentioned it, but this is critical, again, having spent 20 years in Government, you have to merge them. It can't just be reorganization on a piece of paper. It has to be a full integration, and, as Alan pointed out, a very clear charter, that there can't have been DNDO inside this organization and OHA inside this organization. It has to be a blending, a full blending, of the organization. That's probably the biggest pitfall.

Mr. STERN. I would say the biggest pitfall is not adequately defining the function of the new organization that is—in the administration plan, it suggests that this new nuclear unit will be doing a lot more than DNDO currently is doing. The nuclear security field is vast, and nuclear detection and nuclear forensics, which are narrowly what DNDO does, are a small part of that, and they do it well. But if that's going to be broadened, then that should be done intentionally with the resources devoted to the new areas of consideration.

Mr. COHN. I think the other point I would add to those points, and it's as you pointed out, there are dedicated employees across the Department of Homeland Security. Whenever there's a reorganization, clear direction should be given and the leaders have to lead. Leaders have to lead in the direction of the mission as it is set forth because that is what's owed to the employees of the Department.

Mr. RICHMOND. Thank you, Mr. Chairman, and I yield back. Thank you to the witnesses.

Mr. RATCLIFFE. Thank the gentleman. I yield myself as much time as I may consume.

I'd like to start with an issue that we discussed with the prior panel. You all were present in the room and were able to hear the testimony talking about DNDO functioning well, and one of the reasons given for that success was the ability of DNDO to achieve end-to-end solutions in part because the research and development component was contained therein.

I asked a question of Dr. Brothers about the reorganization and the fact that, as it's proposed, the chem/bio research and development would not transfer. His response to that question was essentially different models work well. I want to start with your perspective on that, whether or not you agree with that?

Mr. COHN. I'll start with that. I do think that, as I said in my testimony, there are different models at play here. They have succeeded in some ways. They have failed in others. I think actually that both Mr. Stern and Dr. Gowadia underplay their own role in the success of DNDO. DNDO has been very well led in the past several years, and that has contributed substantially to its success. Because DNDO was organized in the same way since its inception and had significant failures at that point as well.

I think in this instance I wish there was an answer to give to this committee where the work had been done and to be able to say model A is correct or model B is correct. I don't believe that it is right to have multiple models running simultaneously. I do not know which of those models is the best for the Department. But I do believe—and I believe that this opportunity gives Congress the chance to mandate and the Department to carry out an examination, both itself and with an outside independent entity that knows how these different models work in the Department, in other Federal agencies, in private-sector organizations and determine which is the best model for the Department.

Because mixed multiple models in different areas I think is more of a reflection of the desires of the individuals now than what is the most durable solution over time.

Mr. NELSON. I agree with what Alan is saying. I don't think you can have this mixed model. I also think that one of the reasons why you've had such success at DNDO is because you have that tail to nose entire system in process, in place. Alan and I were talking earlier. You know, the original intention of the Department was to have a WMD office that has S&T focus when it was originally thought of, and instead we ended up with an S&T department with a WMD sub-focus.

So we now find ourselves trending back to the original model that was conceived by the people that thought about this originally. So I would like to see those R&D efforts moved over into this entity. I think it is such a critical issue, and the understanding of the topic is so technical that it has to be placed under the experts to understand its information.

Mr. STERN. Thank you. Well, nuclear detection and, for example, biological response, are very different beasts, even in concept. For example, in the area of nuclear detection, we're trying to detect things before they're released. Most of what in the bio world they consider prevention they're actually calling prevention for things in the nuclear world we would call response.

So they're already different concepts. In that context, I guess I really wouldn't have a problem with two different approaches to development existing in the same organization. I do know, however, that for DNDO the integrated model is the right one. When I first started 5 years ago, there was, in fact, a push in legislation to take the R&D portion out of DNDO. I felt then and I feel now it's the wrong approach because it's very, very difficult to separate R&D from testing to acquisition in the overall—in the global architecture that DNDO is in charge of.

So I know that the existing approach is the right one for DNDO. I don't necessarily know if it's right or wrong for the bio and chem world, but I don't know that they necessarily have to have the right—the same approach just to be a little bit—make a slightly separate concept.

One way to resolve this is to put this all including R&D under one big under secretary, the under secretary of science and technology, and turn that into a weapons of mass destruction unit.

Mr. RATCLIFFE. Terrific. Thank you. Mr. Cohn, as you know and as you just mentioned, both DNDO and OHA have had major acquisition failures in the past, and those acquisition failures have, frankly, cost taxpayers millions of dollars. I assume that you think that the current structure of the CBRNE components contributed to that problem.

But do you think—is it your opinion that this new CBRN or CBRNE office will address those types of failures in the future?

Mr. COHN. I think that office as proposed poses a better chance of preventing those failures than the current model. As Dr. Brothers and others mentioned during the first panel, Secretary Johnson has embarked on the strengthening the departmental Unity of Effort Initiative which includes implementing a virtual management system within the Department and empowering the Department's leadership. It's a more closely-examined major program execution and major acquisitions through strategy, joint requirements, programming, and budgeting, and major acquisition oversight.

Creating an assistant secretary who has full scope responsibilities across CBRNE issues, placing that individual into the leadership and really empowering that individual to speak definitively, on the one hand, in those fora, and to engage with the heads of the operational components and with the external stakeholders who, as was mentioned, are the source of the requirements, and who will be the end-users of what is developed, I think gives a better chance of creating success in acquisition oversight and not wasting—not leading to the same program cancellations and terminations that we've seen than the current model.

Mr. RATCLIFFE. Terrific. Thank you, Mr. Cohn.

Mr. Nelson, given your experience in the field and in the interagency, I just want to make sure I have your testimony very clearly on how the current CBRNE structure negatively affects DHS's role and stature within the interagency.

To that point, I'd like you to speak to the importance of DHS having a strong focal point for interagency collaboration.

Mr. NELSON. Thank you, Mr. Chairman. It's critically important. You know, as I said in my written testimony, today there are very few single agency problems, in there are even fewer single agency

solutions. So interagency coordination with Federal, and with State and local, is critically important. On the very basic end, you have to be able to—if I have a question who do I call, who do I pick up the phone and call at what point in that process? Right now it's so fragmented in the industry, in DHS, you don't know where it is on the S&T side, or whether it's with DNDO or with OHA. That makes it extraordinarily difficult.

Moreover, when you're talking about interagency coordination, whether it's a meeting at the White House or any other interagency meeting, you usually get one seat at the table per department. Those individuals need to be able to speak for the whole of the issue. It's not convenient and useful to inject subject-matter experts for every single policy meeting. You have to have people that can go into those meetings that are aware of the full breadth of what is going on inside the Department.

Right now there isn't a cadre of individuals inside DHS that can represent the Department in meetings regarding WMD issues at large. They have to determine what the subject is and then pull those individuals in.

Mr. RATCLIFFE. Okay. Thank you. So, Mr. Stern, let me follow up with you in that regard. Because in your testimony, one of the things you—to quote you, you said that the proposed structure, “has the potential to diminish rather than strengthen the function of DNDO.”

I'm wondering whether you think that the way this creating an office with the assistant secretary sort-of better evaluates the importance of the mission and gives DHS CBRNE programs a better stature and voice within the interagency?

Mr. STERN. Yeah. So after 25 years of working, actually more, in the interagency, most WMD-related important meetings aren't WMD at large. They're nuclear, biological, chemical, separate. So if the nuclear part of DHS is what would in the new structure be a deputy assistant secretary or an office director, that individual might not even be invited to some of these meetings.

So, yeah, I believe that in order to maintain, if not strengthen the role of nuclear in the DHS's structure, in fact, the individual in charge needs to be elevated, not diminished, in his or her role. It may sound overly bureaucratic, but having, again, worked for many years in interagency, there's a big difference between an office director and an assistant secretary and what that individual can get done.

Mr. RATCLIFFE. Gentlemen, thank you all for being here. I know I speak on behalf of everyone that your testimony's been very valuable. Obviously a number of the subcommittee Members weren't able to return after votes, but Members of the subcommittee will likely have some additional questions for you since they weren't able to return, that we would ask you to respond to those in writing.

Pursuant to committee rule 7E, the hearing record will remain open for a period of 10 days. Without objection, the subcommittees now stand adjourned.

[Whereupon, at 4:46 p.m., the subcommittees were adjourned.]

APPENDIX

QUESTIONS FROM HONORABLE DONALD M. PAYNE, JR. FOR THE DEPARTMENT OF HOMELAND SECURITY

Question 1. It has been observed that there are CBRNE functions from across the Department—from FEMA to NPPD—that are not included in the proposed realignment. How did the Department decide to include certain activities but not others in the reorganization proposal?

Answer. The proposed reorganization of the Department's chemical, biological, radiological, nuclear, and explosives (CBRNE) functions is intended to focus headquarters offices on the principal objectives of the Unity of Effort initiative, including integrating the broad and complex Department of Homeland Security (DHS) mission space and empowering DHS components to effectively execute their operations. Other CBRNE functions exist within the Department, including those at the U.S. Customs and Border Protection and the Federal Emergency Management Agency. Alignment of the Department's headquarters CBRNE-related support programs and activities will strengthen DHS operational activities. Since this was a reorganization of headquarters' functions to create a mission support office and to minimize disruption of operations, we did not consider programs and efforts currently executed by the above-mentioned operational components.

Question 2a. The Department does not anticipate any cost savings from reorganization, but there is potential for new costs to be incurred.

For example, would the over 200 employees of the new CBRNE Defense Office be co-located at some point in the future?

Question 2b. What other costs could result from the proposed CBRNE Defense Office?

Answer. The Department intends to undertake major movements of personnel associated with the proposed CBRNE reorganization in concert with the expiration of current office leases. Physical consolidation of the new CBRNE office may occur as early as 2018, pending approval of requested funding for DHS Headquarters moves to the St. Elizabeths Complex.

The Department is committed to responsibly identifying ways to reduce its overhead costs, as exemplified by the new facilities consolidation pilots being undertaken in the Seattle and Boston areas, in order to ensure we make every dollar available to directly enable operations in the field. DHS will consider the new CBRNE Office, along with other DHS headquarters offices, as we explore other efficiencies proposals.

Question 3. Dr. Brinsfield, as DHS plans to expand the scope of its biosurveillance capability, what impact will this have on prioritization and investment decisions across the biosurveillance enterprise for the core biosurveillance functions called for in the National Strategy for Biosurveillance?

Answer. DHS is committed to countering biological threats and hazards and implementing the National Strategy for Biosurveillance. The 2014 DHS Quadrennial Homeland Security Review included biological threats and hazards as a top homeland security risk. Since the Department's biosurveillance activities are performed by the OHA, which is being brought into the new CBRNE entity in its entirety, the reorganization will not have an immediate effect on biosurveillance. In the longer run, bringing the Department's biological risk assessment activities within the CBRNE entity should improve our ability to ensure that our biosurveillance efforts are optimally informed about the evolving nature of biological risks and hazards. However, these efforts will also be informed by CBRNE-related projects and expertise remaining in the Science and Technology (S&T) Directorate and other parts of DHS, and maintaining the close working relationships between the CBRNE entity and the rest of the Department will be necessary to optimally inform biosurveillance and other activities.

This CBRNE reorganization is focused on making smart choices in consolidating DHS headquarters functions to address threats. The goal is not to change the scope of our biosurveillance capability but rather to be better able to adapt and adjust to threats as they evolve. Further, the reorganization will help amplify existing efforts by looking across the entire space to find the gaps and work together to address them.

Question 4. Dr. Brinsfield, this year, the Office of Health Affairs Chemical Defense Program conducted a Chemical Demonstration Project in Baltimore, Maryland. Within the next year, the Demonstration Project will be expanded to four new cities.

How will the Department ensure that on-going activities, such as the Chemical Demonstration Project, are not interrupted?

Answer. Since the Chemical Demonstration Project is conducted by the OHA, which is being brought into the new CBRNE entity in its entirety, the reorganization will not have an immediate effect on this program. Rather, this reorganization is intended to integrate the broad and complex DHS mission space and empower DHS components to more effectively execute their operations. The Chemical Defense Program will continue to pursue its projects and provide invaluable insight and expertise to DHS senior leaders, the Federal Government, and State and local communities. OHA chemical demonstration projects are currently underway in four cities: Houston, TX; Boise, ID; New Orleans, LA, and Nassau County, NY. These four cities were chosen through a competitive selection process evaluating their chemical threat risk (city and venue) and community interest and goals to improve chemical incident preparedness. I can assure you that, as a critical portion of our chemical defense portfolio, the demonstration projects will not be interrupted due to the forming of the new CBRNE office. It is our intent through the consolidation of the CBRNE missions to increase awareness of the Chemical Defense Program.

The demonstration projects focus on improving information flow, enhancing decision making and aligning resources to optimize emergency response. At the completion of all the demonstration projects, OHA will have examined in detail where the leverage points within the emergency response system exist and will have identified where specific solutions can address the greatest challenges, limitations, and gaps each community faces. Our analysis is intended to lead to the delivery of a set of preparedness tools, shared best practices, and guidance for comprehensive community preparedness to a large-scale chemical incident.

Question 5. Dr. Brinsfield, does the Department anticipate that the consolidation would have an effect on the mission of the National Biosurveillance Integration Center?

Answer. Since the National Biosurveillance Integration Center is located within the OHA, which is being brought into the new CBRNE entity in its entirety, the reorganization will not have an immediate effect on its operations or mission. Rather, this reorganization is intended to integrate the broad and complex DHS mission space and empower DHS components to effectively execute their operations. OHA's programs, including the National Biosurveillance Integration Center (NBIC), will continue within the new CBRNE organization. In meeting its mission to integrate information about threats to human, animal, plant, and environmental health, NBIC already shares information with its partners regarding a variety of CBRNE and emerging infectious disease threat sources which will continue and complement the activities of the new organization. For example, past reporting has occurred during nuclear power plant disasters, chemical spills, natural disasters, and novel disease outbreaks such as Ebola. NBIC frequently taps into the subject-matter expertise resident within OHA to field a range of requests from its stakeholders. This reach-back capability will only be strengthened within the new structure as NBIC will have more ready access to the considerable radiological, nuclear, and explosive SMEs consolidated in the new organization. The Department sees the reorganization as an opportunity to capitalize on the concentration of CBRNE expertise to enhance the mission of NBIC.

Question 6. Dr. Brinsfield, the current BioWatch system has been in the field for over a decade and the National Academies and the GAO have raised questions on the value this type of biosurveillance adds across the broader threat arena. What impact will expanding the scope of DHS's traditional biosurveillance efforts have on the BioWatch program?

Answer. DHS is committed to countering biological threats and hazards. The 2014 DHS Quadrennial Homeland Security Review included biological threats and hazards as a top homeland security risk. The BioWatch Program is the only early warning system for aerosolized biological threats and is a key element of DHS's strategy to manage biological risk, per the 2014 QHSR. BioWatch helps build the preparedness of local jurisdictions in case of a biological attack, informing and equipping de-

cision makers at the local, State, and Federal levels with the information they need to make decisions that can save lives and mitigate damage. The goal of this CBRNE reorganization is not to change the scope of our biosurveillance efforts or the role for BioWatch, per se, but rather to be better able to adapt and adjust to threats as they evolve. BioWatch will benefit from the enhanced coordination, as will all of OHA's programs. In addition, the Secretary identified BioWatch as the DHS Program of Record for biosurveillance and directed that the technology used in the BioWatch Program be updated. Consistent with the Secretary's decision, the OHA BioWatch Program is actively working with DHS S&T, our Federal partners and partners at the State and local level to identify new and better technologies and field them as soon as possible.

The use of biodetection, while complementary with surveillance, provides certain advantages over medical surveillance alone. Medical surveillance detects the presence of disease in the population after people become symptomatic. Biodetection detects the presence of a potential attack prior to the population becoming symptomatic and allows for the dispensing of antibiotics before symptoms appear, making for a more efficient response. These benefits of biodetection were reinforced by an independent analysis conducted by both the Institute for Defense Analyses in 2013 and Sandia National Laboratory in 2012. In addition, the environmental surveillance provided by BioWatch provides more precise information on timing, specific location and the type of agent used in an attack.

Question 7. If Congress were to approve the reorganization proposal, what specific steps would the Department take to limit the negative impact on employee morale?

Answer. The morale of our employees is a priority for the Department. The deputy secretary is undertaking a number of initiatives to find innovative ways to engage employees, share employee ideas, and address concerns regarding transparency in hiring, promotion, and training opportunities. These principles will be practiced within the new CBRNE office. Specifically, the Department will engage employees and provide avenues for information sharing and feedback between leadership and staff throughout the reorganization process. The Department will develop a change management and communications plan to help make the process as smooth as possible for all employees.

Open communication throughout the included organizations and two-way information forums will reduce the negative impact on morale. Effective change management will be important as this reorganization takes place, and we have been keeping our employees apprised and engaged in the process. We are committed to helping our employees achieve our mission through this new organization, and we will continue to support them and help them in moving the mission forward.

Question 8. Two years into the realignment, what should this committee be looking for, in the way of metrics, to know whether it was a success?

Answer. The new CBRNE office should be judged on how well the Department's CBRNE policies, strategies, plans, budgets, acquisitions, and other activities are synchronized across the breadth of DHS stakeholders and how they are driving improved operational results. We will not be judging the new organization solely by the publication of new guidance documents. Rather, we will assess the effectiveness of the new CBRNE Office, as we do with other elements of DHS, on the success of: CBRNE capability requirements development; sustainable investment in CBRNE-related capabilities; CBRNE acquisition program health; CBRNE operational plan development and exercises; and ultimately, our response effectiveness to CBRNE threats and incidents, whether naturally-occurring or man-made.

Question 9. The proposed consolidation for the CBRNE office appears a bit lopsided. The CBRNE office will do R&D for radiological and nuclear activities, but S&T will keep researching chemical and biological technologies.

Does the Department anticipate requesting future reorganizations to further align CBRNE R&D functions?

Answer. The Department does not have future plans to further align chemical, biological, radiological, nuclear, and explosives Research and Development (R&D) functions. One of the driving principles for this reorganization has been to "preserve programs and activities that are currently working." Therefore, the proposed structure for R&D seeks to minimize the disruption to CBRNE R&D activities. Due to the current synergies between chemical and biological R&D within S&T and the facilities at which the work is conducted, the R&D function will not transfer to the CBRNE Office. The CBRNE office would provide requirements and work closely with S&T for the needed chemical and biological R&D for the office. Radiological and nuclear R&D, which is currently performed extremely effectively in DNDO, would move to the new CBRNE office and continue to receive R&D requirements from the DHS operating components.

Question 10a. There are concerns about how the CBRNE reorganization would affect the existing relationships that OHA, S&T, and DNDO have with stakeholder groups.

Under the reorganization, how does the Department envision sustaining relations with stakeholder groups?

Question 10b. For example, if the assistant secretary determined that the BioWatch program no longer aligned with the current threat picture and decide to nix the program, how would the Department go about sustaining its partnerships with the State and local public health officials who participated in BioWatch?

Question 10c. Similarly, how does the Department expect Federal interagency relationships to be affected by the reorganization?

Answer. OHA, S&T, and DNDO, and the other offices included in this reorganization, will continue to provide the same level of support to their Federal, State, and local stakeholders and will work to ensure minimal disruption to their partners. One of the focus areas of the new organization is to ensure strong coordination processes and procedures both internally and with other Departmental and interagency partners to advance the DHS CBRNE agenda through a single point of contact on CBRNE issues. In this new structure, when an agency reaches out to DHS, we will be coordinated and ready to work with their equivalent offices. Similarly, when State, local, non-Governmental, and private partners reach to DHS for help, we can assist them regardless of the issue, or the changing nature of the threat they face.

The BioWatch Program is the only early warning system for aerosolized biological threats and is a key element of DHS's strategy to manage biological risk, per the 2014 QHSR. There are no plans to cancel the BioWatch program. Further, the assistant secretary for CBRNE would use strategic prioritization documents and Departmental review processes when implementing the Department's priority programs. It should be noted that a major strength of the BioWatch Program is the interaction that it has at virtually all levels of Government. The BioWatch Program is building preparedness by coordinating and/or participating in 30-plus exercises/drills annually, creating guidance documents, providing essential training and technical assistance to stakeholders Nation-wide, and enabling a forum for Federal, State, and local stakeholders to share all types of relevant data and information during an act of bioterrorism. Also, the BioWatch Program has forged strong ties at the Federal level, expanding cooperation and strengthening ties with a number of agencies. This capability will be maintained and further leveraged within the new CBRNE office.

QUESTION FROM HONORABLE SHEILA JACKSON LEE FOR KATHRYN H. BRINSFIELD

Question. Biological threats like Ebola can cross our borders without notice. An apparently healthy person that enters the United States can become infectious within 21 days. Ebola is not the worst of the highly infectious diseases—only an example of one of the challenges of a biological early detection system. We have hoped for an automated system that could detect chemical and perhaps biological agents on a person through an early detection system. The experience of the last year with Ebola raises questions about the role first responders play in early detection and containment.

The focus of much of the work on detection and containment efforts may focus on emerging infectious diseases, which can be defined as those infectious diseases that have newly appeared in a population or have existed but are rapidly increasing in incidence or geographic range, or that are caused by one of the NIAID Category A, B, or C priority pathogens.

Ebola is designated as a Category A infectious disease along with anthrax, botulism, plague, and small pox. It is likely that should a terrorist attack come in this form, it would likely be discovered after people start to become ill.

Should we be more focused on training, equipment, and protocols for first responders on the local and State level to better prepare for biological threats?

Would a survey conducted by local health departments of hospitals be helpful in learning how prepared they may be to address highly infectious diseases that may arrive without notice?

Answer. The training, equipment, and protocols for first responders are of primary importance for the Department. For example, in the past year OHA has published two guidance documents for first responders in collaboration with our interagency partners: *Patient Decontamination in a Mass Chemical Exposure Incident: National Planning Guidance for Communities*; and *First Responder Guidance for Improving Survivability in Improvised Explosive Device (IED) and/or Active Shooter Incidents*. Past guidance has focused on protecting responders against the anthrax threat. In addition to providing guidance, OHA is also developing a pilot initiative to educate

first responders about anthrax and offer them voluntary access to the anthrax vaccine.

OHA collaborates with National emergency medical service (EMS) organizations and Federal Government entities to help identify EMS system needs and possible solutions and engages EMS stakeholders Nation-wide to improve response coordination between jurisdictions and agencies, across State lines, and with the Federal Government. Through these collaborations, OHA contributed to interagency guidance on personal protective equipment for first responders in response to the Ebola threat; and worked with FEMA to make sure communities can use their grant dollars to purchase personal protective equipment for non-law enforcement personnel responding to Improvised Explosive Device (IED) or active-shooter incidents. OHA also participates in the Interagency Board, a group of emergency preparedness and response practitioners who assist in the development and implementation of performance criteria, standards, test protocols, and requirements for all-hazards incident response equipment.

The BioWatch program works with State and local officials and responders in jurisdictions across the country to develop clear and detailed plans to respond to biological agent detection, and the NBIC distributes reports on emerging and current biological threats to approximately 1,500 State and local officials. We are also developing a set of preparedness tools, shared best practices, and guidance for comprehensive community preparedness to a large-scale chemical incident through our chemical demonstration projects. We will continue to prioritize supporting first responders, in coordination with our DHS and interagency partners, to ensure they get the tools, resources, and training they need to act as the Nation's first line of defense.

In the event of a National health threat/emergency the Department of Health and Human Services (HHS) Assistant Secretary for Preparedness and Response (ASPR) and HHS's Centers for Disease Control and Prevention (CDC) have substantial responsibilities. ASPR is the chief advisor on public health and medical preparedness for and response to emergencies. It maintains a database of hospitals and associated resources, as well as other facilities capable of providing health care; it also manages a program that can obtain near-real-time counts of available beds under several bed categories. Among CDC's public health responsibilities, specifically in the response to Ebola, were designing the tiered health care system approach (front-line facilities, assessment hospitals, and Ebola treatment centers), deploying teams of experts to hospitals at the request of States, and working with States and hospitals to identify any operational gaps and recommend improvements. The CDC also issued *Interim Guidance for Preparing Frontline Healthcare Facilities for Patients Under Investigation for Ebola Virus Disease*.

QUESTION FROM HONORABLE DONALD M. PAYNE, JR. FOR REGINALD BROTHERS

Question 1a. Dr. Brothers, historically, the Science and Technology Directorate struggled to get its footing in the Department, but seems to have made progress in recent years.

How does the Department plan to address the unavoidable employee morale implications for workers impacted by the stripping of chem-bio risk assessment responsibilities from S&T?

Answer. As stated previously, the morale of our employees is a priority for the Department. The Deputy Secretary is undertaking a number of initiatives to find innovative ways to engage employees, share employee ideas, and address concerns regarding transparency in hiring, promotion, and training opportunities. These principles will be practiced within the new CBRNE office.

S&T's workforce is committed to the Department's missions and the Secretary's Unity of Effort initiative. We anticipate minimal morale impact, but S&T leadership is committed to open and transparent communication with any affected staff to address concerns and mitigate any negative perceptions. Open communication throughout the included organizations and two-way information forums will also reduce the risk to negative impact on morale. We are committed to helping our employees achieve our mission through this new organization, and we will continue to support them and help them achieve their goals moving forward.

S&T has initiated several broader morale initiatives which we believe will also mitigate any potential negative effects. We have established, for example, an Employee Council with several subcommittees, all comprised of employees from a cross-section of the S&T to develop solutions and improved procedures in key areas of our business.

Question 1b. How will losing the risk assessment component of its work affect S&T's chem-bio R&D responsibilities?

Answer. The Terrorism Risk Assessments and Biodefense Knowledge Center are integrated elements of S&T's Chemical and Biological Defense R&D portfolio and help inform projects dealing with emerging and future threats. With the proposed move to a new CBRNE office, certain changes and additional coordination will need to be made to ensure the continued operation and success of the R&D portfolio. S&T would work closely with the proposed CBRNE office to ensure that S&T's needs for longer-term assessments are still met.

Question 1c. If DHS expanded its bio-surveillance capability, how would it ensure its efforts do not duplicate those performed by other agencies, such as the Departments of Health and Human Services, Agriculture, the Interior, and the Environmental Protection Agency?

Answer. As stated previously, this CBRNE reorganization is focused on making smart choices in consolidating DHS headquarters functions to address threats. The goal is not to change the scope of our biosurveillance capability, but rather to be better able to adapt and adjust to threats as they evolve. The reorganization should not cause any duplication of efforts performed by other agencies, and biosurveillance activities will continue to be coordinated with other Federal agencies through established mechanisms like working groups, interagency policy committees, and requirements generation activities. We believe the CBRNE office will help to strengthen and streamline interagency relationships and collaboration to advance the DHS CBRNE agenda, by creating one place in DHS headquarters where all Federal agencies can go to find the right expertise on CBRNE-related issues.

QUESTIONS FROM HONORABLE SHEILA JACKSON LEE FOR REGINALD BROTHERS

Question 1. Dr. Brothers, the Science and Technology Office over the course of its existence had difficulty developing a Federal laboratory testing process that certifies technology for its ability to perform as needed. You have an exceptional background in science and technology which includes extensive experience in the management of DOD laboratories.

What have you been able to do to improve the laboratory accreditation and testing process?

Answer. S&T is responsible for research, development, testing, and evaluation in DHS. To assist the under secretary in fulfilling responsibilities for test and evaluation, the Secretary delegated authorities to the director of operational test and evaluation (DOT&E). The DOT&E has well-established procedures for supporting program development of realistic operational tests. However, this type of testing typically occurs late in the acquisition process, after initial production has begun, in order to approve proceeding to full rate production. It has been our observation that a key determinant of successful acquisition is ensuring the program properly sets the conditions to begin initial production. We continue to work with our partners in the DHS management directorate and in DHS components to improve early engagement and strengthen acquisition processes by involving S&T in developmental testing and evaluation activities, and providing systems engineering support for assessment of technical risks. If you are interested in more information, we would be happy to provide you or your staff a more in-depth briefing on the subject.

Question 2. Has the Office of Science and Technology been able to compete for and recruit the top talent you need? If no, why not?

Answer. Human Resources S&T managers have used a variety of hiring authorities to attract qualified applicants. For example, S&T makes optimal use of Homeland Security Act of 2002 Section 307 to hire eminent experts in science and engineering under the Administratively Determined (AD) hiring authority, with 27 AD employees on-board now or in the application pipeline. We also use the Intergovernmental Personnel Act authority to augment our ability to obtain experts in science and engineering for temporary appointments. S&T has also utilized a host of short-term detail assignments, both reimbursable and non-reimbursable, to be able to acquire individuals with specific program-related skills and experience when needed.

Question 3. Is there something that the committee can do to improve the ability of your office to identify technology needs and to inform the committee on what innovations are needed but are not currently available?

Answer. S&T appreciates that Congress has been supportive of the organization and the need in the Department for wider use of better technology. Through Unity of Effort-focused bodies like the Deputy's Management Action Group and Joint Requirements Council, S&T has made great strides to draw closer to the components and more effectively identify and address their technology gaps and needs. New S&T efforts underway such as the Targeted Innovation Technology Acceleration Network (TITAN) along with enduring efforts such as the Centers of Excellence are ensuring that S&T connects the Homeland Security Enterprise to innovation com-

munities in small businesses, at universities, and elsewhere around the country and abroad. As S&T continues to implement new and better ways to deliver innovative solutions, we will also continue to work with Congress to keep Congress informed of the progress we are making. If you, or your staff, are interested in more information on S&T's vision for the future of the organization, we would be happy to provide a more in-depth briefing on the subject.

QUESTIONS FROM HONORABLE SHEILA JACKSON LEE FOR HUBAN A. GOWADIA

Question 1. Dr. Gowadia the 18th Congressional District of Texas is located in the city of Houston. Houston is the Nation's fourth-largest city, and has one of the largest ports in the Nation, an international airport and a complex State and inter-State highway system.

As you know, nuclear threats may involve taking radiological materials that are used for beneficial medical or industrial purposes such as fuel or spent fuel for a nuclear power plant, radiological material used in diagnosis or treatment of patients, or industrial material. The tracking and management of these materials would be of importance to National, State, and local authorities.

Should the materials come under the control of terrorists could they be combined with an explosive device?

Answer. If stolen or otherwise acquired radiological materials came into the possession of a terrorist, it is possible they could be used in an explosive radiological dispersal device, otherwise known as a "dirty bomb."¹ Such a bomb uses conventional explosive to disperse radiological material.

Question 2. Could a weapon like this contaminate a large area while also exposing people to immediate and long-term health risks?

Answer. It is extremely difficult to design a dirty bomb that would deliver radiation doses high enough to cause acute radiation health effects or fatalities in a large number of people. Near-term injuries from a dirty bomb would primarily occur from the heat, debris and force of the conventional explosion used to disperse the radioactive material, affecting only individuals close to the site of the explosion.² In addition, however, a dirty bomb is expected to have economic and behavioral health consequences. For example, radioactive contamination from a dirty bomb could deny use of the area and necessitate an expensive clean-up, thereby causing a disruption to lives and commerce. It would also likely cause anxiety to those in the immediate and surrounding areas who believe they had been exposed to radiation.³

The long-term health effect of exposure to radiation from a dirty bomb is the elevated risk of developing cancer later in life, commensurate with the level of radiation dose incurred, although the risk is limited.⁴

Question 3. What can be done to track the use and disposal of radiological materials found in industrial, research, and medical devices that could pose a threat if obtained by terrorists?

Answer. To monitor the use and disposal of radiological materials found in industrial, research, and medical applications, the U.S. Nuclear Regulatory Commission (NRC) uses the National Source Tracking System (NSTS), a secure web-based database that tracks Category 1 and 2 radioactive sources⁵ regulated by the NRC and the Agreement States.⁶ NSTS tracks data spanning the life cycle of the source from manufacture through shipment receipt, to decay, and burial. This system fulfills the U.S. Government's commitment to implement a National source registry, as described in the Code of Conduct on the Safety and Security of Radioactive Sources, which the International Atomic Energy Agency (IAEA) issued in January 2004.⁷

QUESTIONS FROM HONORABLE DONALD M. PAYNE, JR. FOR ALAN D. COHN

Question 1. If Congress were to approve the reorganization proposal, what specific steps would the Department take to limit the negative impact on employee morale?

¹National Academies and U.S. Department of Homeland Security, *Radiological Attack: Dirty Bombs and Other Devices*. Washington, DC (2004), 1. Retrieved from <http://www.dhs.gov/publication/radiological-attack-fact-sheet>.

²Ibid.

³Ibid.

⁴Ibid.

⁵International Atomic Energy Agency, *Categorization of Radioactive Sources*, Safety Guide No. RS-G-1.9 (2005).

⁶Nuclear Regulatory Commission Agreement State Program, <http://www.nrc.gov/about-nrc/state-tribal/agreement-states.html> (June 30, 2015).

⁷International Atomic Energy Agency, *Code of Conduct on the Safety and Security of Radioactive Sources*. Vienna, Austria. (2004) 6. Retrieved from http://www-pub.iaea.org/MTCD/publications/PDF/code-2004_web.pdf.

Answer. Reorganization of DHS's headquarters CBRNE functions is an opportunity to improve morale across the Department's CBRNE functions. Employee morale is enhanced in any organization when:

- Mission responsibility is clearly defined and matched with appropriate authority;
- The leadership structure is lean and sensible;
- The organization's leaders are held accountable for excellence and hold their subordinates accountable for excellence;
- The organization recruits, trains, and focuses on retaining top talent, creates progressive opportunities for advancement into either leadership or senior technical positions, and ensures a robust interchange of personnel and information between headquarters entities, the Department's operating components, and the Department's external stakeholders.

Reorganization gives the Department and the leaders of the Department's CBRNE functions the opportunities to implement or enhance these elements.

Question 2. Two years into the realignment, what should this committee be looking for, in the way of metrics, to know whether it was a success?

Answer. The Department has put forward a set of goals for the proposed consolidation of its CBRNE headquarters functions, which provide the foundations for outcomes and metrics such as the following:

- *Provide Clear Roles and Responsibilities for DHS HQ and Operating Components.*—The Secretary has formally delegated CBRNE-related authorities and designated CBRNE-related responsibilities, and DHS headquarters offices and operating components publicly identify and rely on the DHS CBRNE headquarters office for those responsibilities assigned to the CBRNE office.
- *Enable DHS to Formulate and Communicate Consistent Departmental Positions on CBRNE Issues.*—Department offices and operating components, interagency partners, external stakeholders, and Congress consistently identify the CBRNE office as the source for consolidated, integrated, and sensible CBRNE-related Departmental positions on CBRNE issues.
- *Provide DHS the Ability to Effectively Structure, Oversee, and Execute Major CBRNE-Related Acquisitions.*—The CBRNE office, working with the relevant component Chief Acquisition Executives, the DHS Management Directorate, the DHS Joint Requirements Council and Investment Review Board, and the Department's overall governance bodies (i.e. the Deputy's Management Action Group and the Senior Leadership Council), has ensured that all CBRNE-related programs on the DHS Major Acquisition Oversight List are properly aligned to mission, have clearly-defined joint requirements responsive to operational needs, are funded at the levels specified in their acquisition program baselines, and are performing at the level anticipated in their program designs.

These or similar metrics can serve as effective proxies for the success of the consolidated DHS headquarters CBRNE office.

Question 3. The proposed consolidation for the CBRNE office appears a bit lopsided. The CBRNE office will do R&D for radiological and nuclear activities, but S&T will keep researching chemical and biological technologies.

Does the Department anticipate requesting future reorganizations to further align CBRNE R&D functions?

Answer. As a private citizen, I do not know and cannot speculate on whether the Department anticipates requesting future reorganizations of the Department's CBRNE R&D functions. As discussed at the hearing, it is difficult to say with certainty whether the current R&D model for radiological and nuclear activities, the current R&D model for chemical and biological activities, or a third model, is best-suited to ensuring effective mission execution and guarding against the failure of major systems acquisitions. However, this is an answerable question, and Congress and the Department should actively seek that answer. For that reason, Congress should mandate that the Department assess the effectiveness of each of these models, and should mandate that an independent study be conducted by an organization with familiarity with these models as well as those of other Federal departments and agencies and corporate entities. Congress can then revisit this last CBRNE-related organizational question once both the Department and an independent organization have completed their review.

Question 4a. There are concerns about how the CBRNE reorganization would affect the existing relationships that OHA, S&T, and DNDO have with stakeholder groups.

Under the reorganization, how does the Department envision sustaining relations with stakeholder groups?

Question 4b. For example, if the assistant secretary determined that the BioWatch program no longer aligned with the current threat picture and decide to nix the pro-

gram, how would the Department go about sustaining its partnerships with the State and local public health officials who participated in BioWatch?

Question 4c. Similarly, how does the Department expect Federal interagency relationships to be affected by the reorganization?

Answer. As a private citizen, I do not know and cannot speculate about the Department's plans for how a consolidated CBRNE organization would interact with its partners and stakeholders. However, consolidation of the Department's headquarters CBRNE functions provides the opportunity to enhance the Department's relationships with those partners and stakeholders. Consolidation of these functions allows the Department to make decisions concerning its portfolio of CBRNE programs and activities in a consolidated, integrated, and transparent way. Consolidation also provides a single senior official with true responsibility and authority across the Department's CBRNE headquarters responsibility to serve as the senior point of contact for the Department's partners and stakeholders, and the spokesperson for the Department with respect to external partners and stakeholders. So, for example, should the Department decide that a specific program—or approach for executing a program—is no longer sound, the Department would need to make such a decision and determine the best path forward in conjunction with its interagency and non-Federal partners and stakeholders. A single DHS headquarters CBRNE official, working together with the Department's leadership and the Department operating components that maintain the operational relationships with the relevant partners and stakeholders, would better enable the Department to enhance its stakeholder engagement in such a situation.

QUESTIONS FROM HONORABLE DONALD M. PAYNE, JR. FOR WARREN STERN

Question 1. If Congress were to approve the reorganization proposal, what specific steps would the Department take to limit the negative impact on employee morale?

Answer. Response was not received at the time of publication.

Question 2. Two years into the realignment, what should this committee be looking for, in the way of metrics, to know whether it was a success?

Answer. Response was not received at the time of publication.

Question 3. The proposed consolidation for the CBRNE office appears a bit lopsided. The CBRNE office will do R&D for radiological and nuclear activities, but S&T will keep researching chemical and biological technologies.

Does the Department anticipate requesting future reorganizations to further align CBRNE R&D functions?

Answer. Response was not received at the time of publication.

Question 4a. There are concerns about how the CBRNE reorganization would affect the existing relationships that OHA, S&T, and DNDO have with stakeholder groups.

Under the reorganization, how does the Department envision sustaining relations with stakeholder groups?

Answer. Response was not received at the time of publication.

Question 4b. For example, if the assistant secretary determined that the BioWatch program no longer aligned with the current threat picture and decide to nix the program, how would the Department go about sustaining its partnerships with the State and local public health officials who participated in BioWatch?

Answer. Response was not received at the time of publication.

Question 4c. Similarly, how does the Department expect Federal interagency relationships to be affected by the reorganization?

Answer. Response was not received at the time of publication.

QUESTIONS FROM HONORABLE DONALD M. PAYNE, JR. FOR RICK "OZZIE" NELSON

Question 1. If Congress were to approve the reorganization proposal, what specific steps would the Department take to limit the negative impact on employee morale?

Answer. Response was not received at the time of publication.

Question 2. Two years into the realignment, what should this committee be looking for, in the way of metrics, to know whether it was a success?

Answer. Response was not received at the time of publication.

Question 3. The proposed consolidation for the CBRNE office appears a bit lopsided. The CBRNE office will do R&D for radiological and nuclear activities, but S&T will keep researching chemical and biological technologies.

Does the Department anticipate requesting future reorganizations to further align CBRNE R&D functions?

Answer. Response was not received at the time of publication.

Question 4a. There are concerns about how the CBRNE reorganization would affect the existing relationships that OHA, S&T, and DNDO have with stakeholder groups.

Under the reorganization, how does the Department envision sustaining relations with stakeholder groups?

Answer. Response was not received at the time of publication.

Question 4b. For example, if the Assistant Secretary determined that the BioWatch program no longer aligned with the current threat picture and decide to nix the program, how would the Department go about sustaining its partnerships with the State and local public health officials who participated in BioWatch?

Answer. Response was not received at the time of publication.

Question 4c. Similarly, how does the Department expect Federal interagency relationships to be affected by the reorganization?

Answer. Response was not received at the time of publication.

