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Congressional Committees

Nuclear Nonproliferation: The Administration's 2015 Plan and 2017 Update for Nuclear Proliferation Verification and Monitoring Generally Did Not Address Reporting Requirements

In the National Defense Authorization Act (NDAA) for Fiscal Year 2015,[1] Congress included a provision directing the President to develop and submit to certain congressional committees an interagency plan for verification and monitoring of the potential proliferation of nuclear weapons, components of such weapons, and fissile material.[2] This provision came out of congressional concerns that were highlighted in a 2014 report on nonproliferation monitoring and verification technologies from the Department of Defense's Defense Science Board.[3] The NDAA provision specified four reporting requirements:

(1) An interagency plan and road map for verification and monitoring, with respect to policy, operations, and research, development, testing, and evaluation, including
- identifying requirements (including funding requirements) for such verification and monitoring; and
- identifying and integrating roles, responsibilities, and planning for such verification and monitoring.

(2) An engagement plan for building cooperation and transparency to improve inspections and monitoring.

(3) A research and development (R&D) program to
- improve monitoring, detection, and in-field inspection and analysis capabilities, including persistent surveillance, remote monitoring, and rapid analysis of large data sets, including open-source data; and
- coordinate technical and operational requirements early in the process.

[1]Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015, Pub. L. No. 113-291, §3133, 128 Stat. 3292, 3896 (2014).

[2]Weapons-usable nuclear materials are often referred to as fissile materials or strategic special nuclear materials. Such materials are highly enriched uranium, uranium-233, and plutonium containing less than 7 percent of the isotope plutonium-240.

[3]Department of Defense, Defense Science Board, *Task Force Report: Assessment of Nuclear Monitoring and Verification Technologies* (Washington, D.C.: January 2014).

(4) Engagement of relevant departments and agencies of the federal government and the military departments (including the Open Source Center and the United States Atomic Energy Detection System), national laboratories, industry, and academia.

The administration submitted this classified plan to the congressional committees in October 2015.

The fiscal year 2017 NDAA directed the President to provide certain congressional committees with a "comprehensive and detailed" update to the October 2015 plan.[4] The legislation did not specify any new reporting requirements. This classified update was submitted to the congressional committees in May 2017. The fiscal year 2018 NDAA requires the Department of Energy to produce a new plan.[5] The National Nuclear Security Administration (NNSA),[6] in consultation with interagency partners, submitted this plan to the congressional committees in April 2018.[7]

The conference report accompanying the fiscal year 2018 NDAA includes a provision for GAO to review and submit an assessment of the October 2015 plan and the May 2017 update.[8] This report assesses the extent to which the 2015 plan and the 2017 update addressed the reporting requirements. This is a public version of a classified report that we issued in March 2018.[9] This report omits certain details regarding administration plans and priorities for nuclear proliferation verification and monitoring that NNSA deemed to be classified. Although the information provided in this report is less detailed, it addresses the same objective as our classified report. In addition, the overall methodology used for both reports is the same.

To address this objective, we reviewed the 2015 plan and the 2017 update. We assessed the content of the 2015 plan and the 2017 update against the reporting requirements and we rated the extent to which each document addressed those requirements in one of three ways: (1) addressed the reporting element with detail; (2) addressed the reporting element but without detail; or (3) did not address the required reporting element. In assessing the level of detail, we considered key factors identified in our previous work on national strategies, federal planning, and interagency collaboration. For example, we considered the extent to which the plan or the update provided information regarding specific goals or objectives; strategies to achieve those goals or objectives and how these strategies would be implemented; which agency or agencies would implement the strategies; and other measurable data, such as timelines and the

[4]National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, §3132, 130 Stat. 2000, 2768 (2016).

[5]National Defense Authorization Act for Fiscal Year 2018, Pub. L. No. 115-91, §3136 (2017).

[6]NNSA, a separately organized agency within the Department of Energy, is responsible for the management and security of the nation's nuclear weapons and nonproliferation programs.

[7]We have ongoing work to assess NNSA's April 2018 plan.

[8]H.R. Rep. No. 115-404, at 1096 (2017) (Conf. Rep.).

[9]GAO, *Nuclear Nonproliferation: The Administration's 2015 Plan and 2017 Update for Nuclear Proliferation Verification and Monitoring Generally Did Not Address Reporting Requirements*, GAO-18-372RC (Washington, D.C.: Mar. 30, 2018).

resources required.[10] We also interviewed officials at the Department of State (State) and NNSA who were involved in the development of the 2015 plan and the 2017 update or who reviewed those documents.

We conducted this performance audit from December 2017 to March 2018 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objective. We subsequently worked with NNSA and State from April 2018 through June 2018 to prepare this unclassified version of the original classified report for public release. This public version was also prepared in accordance with these standards.

The Administration's Nuclear Proliferation Verification and Monitoring Plan and Update Generally Did Not Address Reporting Requirements

The 2015 nuclear proliferation verification and monitoring plan and the 2017 update to the plan generally did not address the four reporting requirements. Both the 2015 plan and the 2017 update were short—two and four pages long, respectively—and did not include key details of the types we have identified in previous work on national strategies and interagency collaboration, such as details on specific objectives, strategies to achieve those objectives, roles played by specific agencies, and resources required.

The October 2015 plan was mostly a description of an organizational structure and interagency process intended to address nuclear proliferation, monitoring, and verification. Specifically, the plan focused at a high level on describing the role and composition of an Executive Committee and two subcommittees—an R&D Subcommittee and a Synchronization Subcommittee—that would constitute an interagency process to address four issue areas related to nuclear proliferation verification and monitoring.[11] The plan did not include any specific details that could serve as a road map.

The 2017 update included the same description of the committee structure and interagency process that was presented in the 2015 plan. The 2017 update indicated that the Executive Committee had established a statement of priorities on nuclear proliferation, and the R&D and Synchronization Subcommittees had developed findings and produced strategies to address the statement of priorities. The 2017 update also indicated that the process led to the development of specific strategies, recommendations, and actions.

[10]These criteria are outlined in GAO's previous work on characteristics of national strategies, federal planning, and enhancing collaboration in interagency groups. See GAO, *Combating Terrorism: Evaluation of Selected Characteristics in National Strategies Related to Terrorism*, GAO-04-408T (Washington, D.C.: Feb. 3, 2004); *Results Oriented Government: Practices That Can Help Enhance and Sustain Collaboration Among Federal Agencies,* GAO-06-15 (Washington, D.C.: Oct. 21, 2005); *Environmental Justice: EPA Needs to Take Additional Actions to Help Ensure Effective Implementation*, GAO-12-77 (Washington, D.C.: Oct. 6, 2011); and *Managing for Results: Implementation Approaches Used to Enhance Collaboration in Interagency Groups*, GAO-14-220 (Washington, D.C.: Feb. 14, 2014).

[11]These four issue areas are: (1) developing clear priorities and policy guidance, (2) avoiding duplication and otherwise optimizing U.S. capabilities through improved coordination and communication, (3) aligning research and development to intelligence-informed priorities, and (4) developing opportunities to enhance detection through authorities and activities across government.

In our assessment of the content of the 2015 plan and the 2017 update, we found that the plan and the update either did not address or did not address with detail any of the reporting requirements. Specifically, we found the following:

- Regarding the reporting requirement on an interagency plan and roadmap for verification and monitoring, we found that neither the 2015 plan nor the 2017 update addressed this requirement. As noted above, the plan did identify four areas and stated that the Administration had developed an interagency process to address nuclear proliferation, verification, and monitoring. However, discussing a process does not constitute a plan or a roadmap for verification and monitoring. For instance, the document does not contain any planning details, such as the types of strategies that would be pursued or how the goals would be achieved, interagency roles or responsibilities, timelines, and resource requirements. The 2017 update, as noted above, mentioned strategies established by the subcommittees described in the 2015 plan. However, the 2017 update did not provide detail on these strategies. It mentioned some recommendations and actions, including adjusting U.S. policy to allow intelligence exchanges with partner countries, but it was unclear how these specific actions were related to an overall strategy or plan. Additionally, the Executive Committee established a statement of priorities for five areas of nuclear proliferation concern. We omit specific details of these priorities in this report because the information is classified. The R&D and Synchronization Subcommittees developed strategies to address those priorities. None of these strategies were outlined in the update.

- Regarding the reporting requirement on an engagement plan for building cooperation and transparency to improve inspections and monitoring, we found that the 2015 plan and 2017 update did not address this requirement. Neither the 2015 plan nor the 2017 update included a specific engagement plan for improving inspections and monitoring. The 2017 update specified two actions to engage partner countries, such as Israel and Japan, through intelligence exchanges on regional neighbors and key issues, as well as actions to increase information sharing between federal departments and the intelligence community. However, these actions are not discussed as part of a larger engagement plan and do not address inspections and monitoring.

- Regarding the reporting requirement on preparing an R&D program to improve monitoring, detection, and inspection and analysis capabilities and to coordinate technical and operational requirements, we found that the 2015 plan and the 2017 update did not address this requirement. The 2015 plan did not mention an R&D program that focused on the areas listed in the reporting requirement. The 2017 update mentioned that the R&D Subcommittee formed several working groups that focused on issues including nuclear test detection; special nuclear material production detection; tagging, tracking, and locating; and data science. However, the update did not include an R&D program addressing the required areas.

- Regarding the reporting requirement on engagement of relevant departments and agencies, we found that the 2015 plan and the 2017 update addressed this reporting requirement but without providing details. Both the 2015 plan and the 2017 update listed many departments and agencies involved in nuclear monitoring and verification work that are part of the Executive Committee, the R&D Subcommittee, or the Synchronization Subcommittee. However, the documents did not fully explain how the departments and agencies will be engaged, what their roles and responsibilities in the process are, or what resources they will contribute.

Table 1 summarizes the results of our analysis comparing the 2015 plan and the 2017 update against each of the reporting requirements.

Table 1: Extent to Which the 2015 Nuclear Monitoring and Verification Plan and 2017 Update Addressed Reporting Requirements

Reporting requirements	GAO assessment of how the 2015 plan addressed the element	GAO assessment of how the 2017 update addressed the element
An interagency plan and roadmap for verification and monitoring with respect to policy, operations, and research, development, testing, and evaluation, including (1) identifying requirements (including funding requirements) for such verification and monitoring; and (2) identifying and integrating roles, responsibilities, and planning for such verification and monitoring.	**Did not address**	**Did not address**
An engagement plan for building cooperation and transparency to improve inspections and monitoring.	**Did not address**	**Did not address**
A research and development program to (1) improve monitoring, detection, and in-field inspection and analysis capabilities, including persistent surveillance, remote monitoring, and rapid analysis of large data sets, including open-source data; and (2) coordinate technical and operational requirements early in the process.	**Did not address**	**Did not address**
Engagement of relevant departments and agencies of the federal government and the military departments (including the Open Source Center and the United States Atomic Energy Detection System), national laboratories, industry, and academia.	**Addressed, but without detail**	**Addressed, but without detail**

Source: GAO analysis of 2015 nuclear verification and monitoring plan and 2017 update. | GAO-18-505R

Officials at State and NNSA told us that National Security Council (NSC) staff directed State to take the lead in clearing and submitting the 2015 plan and the 2017 update. According to State officials, NSC provided guidance on the scope and content of the 2015 plan and the 2017 update. For the 2015 plan, NSC provided a two-page draft which State cleared with the interagency. For the 2017 update, State drafted the document, sent it to NSC for comments, and then sent the document to the interagency for clearance. State and NNSA officials we interviewed gave two reasons why the 2015 plan and the 2017 update generally did not address the reporting requirements and were not comprehensive. First, State officials told us that the 2015 plan was a description of the organization of and process for interagency implementation of an August 2015 presidential policy directive (PPD). According to State officials, the PPD was

NSC's response to the 2014 Defense Science Board report and was intended to ensure interagency cooperation in identifying and addressing gaps in the U.S. nuclear proliferation detection and early warning programs. NNSA officials believed the PPD was inspired in part by, but was not a direct response to, the Defense Science Board report. Second, State and NNSA officials said that, at the direction of NSC staff, the 2015 plan and the 2017 update were kept brief rather than providing a detailed response to the reporting requirements. An NNSA official involved in the preparation of the new plan for 2018 said that it would provide a more comprehensive level of detail than the 2015 plan and 2017 update.

Agency Comments

We provided a draft of the classified version of this report to State and NNSA for review and comment. State had no comments on the draft report. NNSA commented that it does not agree with the statement that the PPD was established as a direct response to the 2014 Defense Science Board report. Instead, NNSA stated that the NSC was already working on plans for interagency coordination when the Defense Science Board report was released, but the Defense Science Board report helped broaden the NSC's plans. NNSA stated that it believes the PPD is responsive to a subset of Defense Science Board recommendations. We clarified NNSA's views in our classified report. We also provided a draft of this unclassified version of the report to NNSA for comment, but State indicated it did not wish to review or comment on the unclassified version. NNSA did not have any comments on the unclassified version of the report.

We are providing copies of this product to the appropriate congressional committees, the Secretary of State, and the NNSA Administrator. In addition, the report is available at no charge on the GAO website at http://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (202) 512-3841 or trimbled@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made major contributions to this report include William Hoehn (Assistant Director), Antoinette Capaccio, and Alisa Carrigan.



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