

## **NATIONAL INFRASTRUCTURE ADVISORY COUNCIL**

### **Quarterly Business Meeting**

December 16, 2022

#### **CALL TO ORDER AND OPENING REMARKS**

Ms. Erin McJeon, Department of Homeland Security (DHS) and the President's National Infrastructure Advisory Council's (NIAC) Designated Federal Officer (DFO), thanked everyone for joining the NIAC December Quarterly Business Meeting (QBM) and called the meeting to order. She informed participants that the NIAC is a Federal advisory committee governed by the Federal Advisory Committee Act. As such, this meeting was open to the public. She mentioned that written comments would be accepted following the procedures outlined in the meeting's Federal Register Notice. Then, Ms. McJeon turned the meeting over to Ms. Maria Lehman, GHD, NIAC Vice Chair.

Ms. Lehman thanked everyone for contributing to the development of the short- and long-term study topics. Ms. Lehman informed the participants that members would continue to assist in refining the study topics through discussion. She recommended that the study topics selected be achievable, meaningful, and able to be completed within a reasonable amount of time.

Ms. Lehman expressed her excitement for the upcoming discussion and turned the floor over to Mr. Adebayo Ogunlesi, Global Infrastructure Partners, NIAC Chair.

Mr. Ogunlesi introduced himself and welcomed Dr. Liz Sherwood-Randall, Assistant to the President, Homeland Security Advisor, and Deputy National Security Advisor; Ms. Caitlin Durkovich, Special Assistant to the President and Deputy Homeland Security Advisor for Resilience and Response, National Security Council (NSC); Ms. Melissa Dalton, Assistant Secretary of Defense for Homeland Defense and Hemispheric Affairs; Mr. Nitin Natarajan, Deputy Director, Cybersecurity and Infrastructure Security Agency (CISA); and all NIAC members.

Dr. Sherwood-Randall took the floor and thanked everyone for attending the meeting. On behalf of the President, Dr. Sherwood-Randall welcomed the group, stating that securing our critical infrastructure is a high priority for the President. She added that each critical infrastructure sector is important. Dr. Sherwood-Randall thanked the NIAC Chair and Vice Chair for leading the Council and offered gratitude to her government colleagues for participating in the discussion. She provided a few points on current and relevant global and national events and stated that those events emphasized the importance of the day's NIAC meeting.

Dr. Sherwood-Randall said that Hurricane Ian recently caused widespread destruction to critical infrastructure in Southern Florida. Because of successful investments in the past, such as the Federal funding provided during the Obama Administration for smart technology to build more resilient energy infrastructure, millions of residents in Florida had their power restored more quickly after the hurricane's destruction occurred.

Further, Dr. Sherwood-Randall cited the incident at the electrical substation in North Carolina that disrupted power services for approximately 40,000 residents for several days. She noted that the substation did not have surveillance cameras installed. She stated that investing in resilience

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is key to preventing similar incidents from disrupting power delivery in the future and warned that there are others who seek opportunities to disrupt our lives by sabotaging our infrastructure.

She continued by mentioning a recent pipeline crude oil release incident which caused an interruption in fuel supplies, noting that we remain dependent on access for the foreseeable future. Furthermore, Dr. Sherwood-Randall acknowledged the critical infrastructure challenges caused by Russian aggression on Ukraine.

Dr. Sherwood-Randall mentioned that the President wants to revise Presidential Policy Directive 21 to account for the accelerating climate crisis, increasing electrification and digitalization of our economy, and the importance of strengthening cybersecurity to build resilience in the face of physical and cyber threats. The new policy should consider both voluntary and mandatory standards to ensure the security and resilience of our critical infrastructure.

Dr. Sherwood-Randall expressed her gratitude for NIAC members' work on identifying key factors threatening the resilience of our critical infrastructure on generating near- and longer-term initiatives to enhance resilience against all hazards. Mr. Ogunlesi invited Mr. Natarajan to take the floor.

Mr. Natarajan thanked the NIAC members for their continued deep thinking over the past several months on key threats to the nation's critical infrastructure and gaps in the ways that all stakeholders work together to strengthen critical infrastructure resilience. He remarked on how the themes from the NIAC members' responses to the NSC tasking aligned with efforts that CISA has underway as well as areas CISA seeks to build upon. He noted that this is extremely encouraging from CISA's perspective and expressed his excitement for the discussion of those themes as well as his interest in hearing Ms. Dalton's perspective on critical infrastructure resilience.

Mr. Ogunlesi turned the floor over to Ms. Dalton to discuss critical infrastructure resilience from the perspective of the Department of Defense (DoD).

**KEYNOTE SPEAKER**

Ms. Dalton began by expressing her gratitude for everyone at the meeting. She believes that a partnership with members from all sectors, academia, state, local, tribal, and territorial governments, is essential to securing the nation's critical infrastructure. She advised that her remarks would focus on some of the steps DoD is taking to address the evolving threat to critical infrastructure.

According to Ms. Dalton, in the years following the terrorist attack of September 11, 2001, DoD refocused its approach to national protection with an emphasis on counterterrorism and responding to natural disasters. Now, however, following guidance received from the White House, DoD reidentified and mitigated risks to critical infrastructure in the areas of climate change, natural disasters, and cyberattacks. Ms. Dalton believes that more collaboration between sectors and stronger national infrastructure with more resilience is needed to address the cascading challenges of natural disasters. In addition, she noted that there has been a visible increase in the critical infrastructure disruptions recently, citing the attack on the North Carolina low-impact power substation, which left thousands of residents without power. She also

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mentioned the threats that foreign states like China and Russia pose by infiltrating United States (U.S.) infrastructure to cause chaos and weaken national security.

Ms. Dalton stated that DoD has a more operational and security-oriented lens and focuses on defense critical infrastructure. She identified three lines of efforts to strengthen the resiliency of that infrastructure, including:

- Looking at assets already at DoD installations;
- Considering non-DoD infrastructure that supports DoD work (i.e., water, power, communication, and the transportation network), as the Department heavily depends on commercial and local power supply agencies, and any disruption of their services will impact DoD functions; and
- Ensuring DoD is prepared to operate through the disruptions to accomplish national security assessments, which includes cross-sector partnerships with other federal agencies and state and local governments.

Ms. Dalton stated that it is imperative to improve our understanding of complex challenges impacting critical infrastructure to ensure that our efforts match those challenges. Therefore, DoD is actively expanding existing analytics and big data capabilities via a new Critical Infrastructure Defense Analysis Center. She mentioned that in some instances, DoD programs provide vulnerability assessments that identify potential weaknesses or disruptions and prioritize DoD infrastructure. In other instances, DoD can work with other agencies or companies to assess the vulnerabilities in their networks. For example, DoD is a part of the Sector Risk Management Agency (SRMA) framework, where DoD is the lead for the nation's defense industrial base, or DIB. DoD works with the NSA Cybersecurity Collaboration Center, DoD Cyber Crime Center (DC3), and CISA to protect cybersecurity vulnerabilities for national security.

Additionally, Ms. Dalton stated that the hazards we face not only include physical and cyber threats, but also the impact of climate change. In 2021 and 2022, DoD released two impactful [reports](#) on climate change: *2021 DoD Climate Risk Analysis (DCRA)* and *2022 DoD Climate Risk Analysis (DCRA)*. Federal sustainability policies proposed in the *2022 DCRA* would require DoD agencies to develop climate adaptation plans and annual progress reports to communicate agency actions to bolster climate adaptation and resilience. Lastly, Ms. Dalton said that protection of critical infrastructure is complex and the partnership between sectors and the government is essential. Ms. Dalton turned the floor over to the NIAC Chair.

Mr. Ogunlesi expressed on behalf of NIAC that he was happy that DoD is so focused on collaboration with the private sector.

## **STUDY TOPIC DISCUSSIONS**

Mr. Ogunlesi introduced the next item on the agenda: the potential NIAC study topics. He explained that the goals of the discussion were to receive feedback from members on the specific topics identified in the *Potential Study Topics* document and ask members to volunteer to lead subcommittees. Mr. Ogunlesi reminded NIAC members that all the study topics must be achievable, meaningful, collaborative, and able to be completed within the prescribed time.

Ms. Lehman said that there will be three study topics: one short-term topic to be completed by the March Quarterly Business Meeting and two long-term topics to be completed later. She explained that the topics came from NIAC members' short reports, and each member will be

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asked to volunteer on one of the upcoming subcommittees. To do so, members will email the NIAC Chair, NIAC Vice Chair, and NIAC DFO regarding their preferred subcommittee.

*Short-term Study Topic:*

*Topic 1:*

- What are the NIAC's views on voluntary versus mandatory standards for addressing the risks associated with major cross-sector threats (e.g., cyber and physical attacks, natural disasters, and supply chain disruptions).
- What role should private sector owner/operators have in reducing the potential negative impacts of interdependencies between infrastructure sectors and what can be done to facilitate improved collaboration?
- What are the primary barriers to cross-sector collaboration (e.g., planning, regulation, data, standards, risk-equivalency, intelligence) with respect to resilience and security and how can government and the private sector work together to break down the siloes?

*Long-term Study Topics:*

*Topic 2:*

- What challenges do we anticipate in the future given the existing water availability framework and what actions can the U.S. take to minimize future local/regional/interstate/transnational conflicts? In what ways are infrastructure sectors most dependent on a stable water supply and how should the government prioritize efforts to address potential future shortages?

*Topic 3:*

- What are the anticipated risks of increased electrification and what actions can be taken to mitigate these risks?

***Study Topic 1:***

Ms. Beverly Scott, Beverly Scott & Associates, suggested spending the first 45 days of a short-term study to see what has been implemented in the study topic area. Ms. Madhu Beriwal, Innovative Emergency Management, offered that the short-term study should review existing government authorities. Mr. Ogunlesi suggested reviewing the existing landscape of mandatory versus voluntary standards. Ms. Scott remarked that there are pros and cons to both mandatory and voluntary standards, and she added that voluntary standards reduce accountability but enable the creation of good pilot programs.

Ms. Audrey Zibelman, Senior Advisor and Board Member, mentioned that mandatory standards are necessary in the power sector because they allow initiatives to be more easily adapted, making it more difficult for the utility companies to negotiate with the regulators. On the other hand, voluntary standards allow for endless debates and cited the 2004 blackout that left millions of people without the power as an eye opener.

Mr. Sadek Wahba, I Squared Capital, agreed with Ms. Zibelman that one must account for the public versus private when considering imposing mandatory or voluntary standards. He said that finding adequate funding for public programs is a challenge when imposing mandatory

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standards; the public may not have the money to impose mandatory standards, except when it reaches out to CISA for Federal assistance. However, imposing mandatory standards in the private sector is complex. Mr. Wahba added that companies investing in critical infrastructure will need an incentive to incur the costs when implementing voluntary standards. He mentioned that legislation must be added to the equilibrium to compensate for the national security investment.

Mr. Manu Asthana, PJM Interconnection, observed that varying standards create problems with accountability. He added that the area of cross-sector risks is too wide to be solved in a short study. He suggested NIAC should first identify the crucial cross-sector risks and then try to solve those problems. Ms. Lehman added that the NIAC must prioritize probability versus impact.

Mr. Alan Armstrong, Williams, Inc., mentioned that an issue with economic alignment is that it is not practical, and he cited the Colonial Pipeline ransomware attack in May of 2021 as an example. He suggested conducting studies to identify the most pressing issues, such as critical assets, prior to applying the regulations. Then, the NIAC will be able to focus on the identified critical infrastructure issues because the need for critical infrastructure varies from region to region across the country. Mr. Armstrong suggested focusing on applying the regulations, although one solution cannot apply to all issues. Mr. Joshua Descant, REV/REV Business, agreed and added that sectors vary in their levels of resilience: usually, small sectors are less resilient than the bigger sectors. While he believes baseline standards must be established, the starting point varies across sectors.

Mr. Christopher Wiernicki, American Bureau of Shipping, said that standards and regulations must be outcome-driven. He added that mandatory government requirements are cumbersome processes, unlike voluntary standards that are more flexible. Mr. Wiernicki agreed that the NIAC must identify cross-sector risks, citing marine transportation centers, which are a part of a cross community flow (power distribution, highways, etc.).

Ms. Constance Lau, C3E, added that she would be happy to explore NIAC cross-sectoral issues. She admitted that while listening to Ms. Dalton, she realized that multiple sectors' risks exist within the most critical areas of our infrastructure. In those areas, risks often develop when the operators are from small companies or when less affluent communities develop vulnerabilities because of insufficient funding.

Ms. Clara Pratte, Strongbow Strategies, suggested separating the public sector from the commercial sector and making the standards mandatory for the latter. She expressed her concern about the tribal capacity to comply with those standards because of lack of funding. For example, the Arizona tribal trust has no funds to protect their infrastructure and communities. There are also blind spots in the readiness area to protect data, she said.

Ms. Deneen DeFiore, United Airlines, agreed that mandatory standards are necessary and added that the standards must be performance- and outcome-based. She argued that mandatory standards imposed in the cyber-IT/OT industry do not apply to all industries and some technical IT/OT industries are not obligated to abide by the standards, unlike owners and operators from other industries. She warned everyone that the standards would not be successful if some owners and operators are made to comply with mandatory obligations while other owners and operators are not. She also mentioned the importance of establishing a structure within organizations.

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Mr. Conrad Vial, Sutter Health, offered that the NIAC must review advisory councils' previous research and recommendations to avoid duplicating any work that has already been done, especially in healthcare and cybersecurity. The NIAC must prioritize its work by specifying the purpose and the need, and must solve the dilemma of "should" versus "can" in the private sector. Mandates in healthcare are important but might not be feasible for all, he said. For example, small hospitals acknowledge that they "should" meet standards, but they are unable to satisfy the "can" aspect to follow through on the mandates because they do not have enough money to do so.

Mr. Michael Hayford, NCR Corporation, responded regarding implementation of mandatory standards and focused on supply chains related to payments. He stated that payments in his company go through two or three intermediaries, and mandatory standards can expand risks for payments. Dr. Norma Jean Mattei, University of New Orleans, said that mandatory standards must be adaptive. She wondered how tribal communities can be forced to apply mandatory standards when they have no income.

Mr. Ogunlesi summarized the responses and pondered how the NIAC can ensure adequate resources and mandates to focus on the risks and standards, which he said would become first study topic. Then he moved on to the second topic, relating to water issues.

***Study Topic 2:***

Ms. Lehman briefly introduced the topic of water issues to the members, calling it a cross-cutting problem. She discussed the water issues in the western part of the United States and added that, while some changes are being made, those changes are not sufficient. She noted that last year, droughts in the Western United States significantly lowered the water flow in the rivers, which impaired energy production by the Hoover Dam. While the nation has observed water shortages and fires in states like California, we have also witnessed devastating floods in the Great Lakes region, she observed.

She added that Hurricane Ian recently caused a financial loss of roughly forty to sixty billion dollars. This level of loss is not sustainable on a regular basis, as water impacts all aspects of life, including the country's industries. Ms. Lehman cited the 2014 water crisis in Flint, Michigan, when officials stopped piping in water from Detroit and switched to using water from the Flint River to save money. However, the river water was contaminated, and it took the government over a year to fix it. She added that investments in the water system are not equally distributed, and the water systems in disadvantaged communities are being neglected. She asked the NIAC to address critical water issues in a longer-term study due to its complexity, adding that there are many existing resources already on the subject.

Mr. Jorge Ramirez, GCM Grosvenor, discussed his meeting with a director of pipefitters in Chicago, who introduced him to the new wave of pipefitter training that aims to move the water around the country, especially in municipal, residential areas. He highlighted this as a model for the NIAC to consider in other contexts. Mr. Ogunlesi called on Mr. Ramirez to volunteer for that study topic and suggested he would be a good chair for this subcommittee.

Mr. Vance Taylor, California Governor's Office of Emergency Services, mentioned California and Las Vegas as examples of places with serious water problems. In many small communities, especially in California, water systems are outsourced, and there is a lack of funding to protect

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the systems which become easy targets for cyber-attacks. He warned that drinking water can easily be sabotaged, and the impacts disproportionately affect vulnerable communities. Mr. Wahba suggested adding tribal communities to the discussion on water resources.

Ms. Scott emphasized the importance of people readiness when discussing water issues, highway processes, economics, retirement, and equity. She suggested the NIAC research how much different communities across the country pay for water.

Dr. Patricia Sims, Drake State Community & Technical College, agreed with Mr. Taylor's point and stated that, although resources may be allocated to improve the systems, working with state and local authorities remains a major challenge, and she questioned how to engage the right stakeholders in a dialogue. Dr. Mattei added that the Mississippi River has low water levels due to climate change, which has a huge impact on food security. Further, she said that ground water is imperative to our survival. She volunteered to chair this subcommittee.

***Study Topic 3: Electrification***

Mr. Gil Quiniones, ComEd, suggested that the impacts of decarbonization and electrification will double in the future. The country must also try to predict the ways that continuing climate change will impact decarbonization and electrification, and we must produce equipment and technologies that are compatible with future changes, not with current environments.

Mr. Quiniones advised that there are tools to model future climate change which can assist with this work.

Ms. Zibelman said there are two steps in the electrification study. First, the NIAC should define the scope of electrification as a topic (e.g., equity issues, flexibility, etc.). Second, the NIAC should decide between mandatory versus voluntary standards.

Ms. Lau said the electrification study should be approached through the lens of cross-sector national security. She wondered about future risks as the use of electricity increases.

Mr. Wiernicki expressed that electrification is a bridge to renewable power, and thus, to the future. He added that digitalization can be achieved alongside investments in workforce and talent. He emphasized the importance of the change to digitalization but added that any unintended consequences will only be visible 10 to 15 years from now. Ms. Beriwal agreed with Mr. Wiernicki's statement about possible unintended consequences. She said the country should transition without abandoning our assets. She wants the NIAC to focus on how to improve current assets, as there are many policies about assets being recycled.

**CONCLUDING REMARKS AND ADJOURNMENT**

Ms. Durkovich was delighted with the robust discussion among NIAC members. She suggested that the NSC will circle back with CISA to ensure the richness of the conversation is captured, in what the final NSC charges to the NIAC. Ms. Durkovich announced that the first subcommittee would be stood up in January 2023. Additionally, she thanked everyone and extended her gratitude to CISA. She added that CISA will assist NIAC members and subcommittees to achieve the results needed. Ms. Durkovich closed by saying that she was humbled by the insights and experience of the members.

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Ms. Lehman expressed in closing that the NIAC's work can have a big impact on people's lives.  
Mr. Ogunlesi closed the meeting and wished everyone a happy and safe holiday.



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**DECEMBER 16, 2022, NIAC QBM PARTICIPANTS LIST**

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