



RESEARCH  
AND ENGINEERING

## UNDER SECRETARY OF DEFENSE

3030 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3030

6 MAY 2022

### MEMORANDUM FOR CHAIRMAN, DEFENSE SCIENCE BOARD

SUBJECT: Terms of Reference - Defense Science Board Permanent Subcommittee on Threat Reduction

According to Title 18, § 2332a(c)(2) of the United States Code (U.S.C.), a weapon of mass destruction (WMD) is: “any destructive device as defined in 18 U.S.C. §921; any weapon that is designed or intended to cause death or serious bodily injury through the release, dissemination, or impact of toxic or poisonous chemicals, or their precursors; any weapon involving a biological agent, toxin, or vector; or any weapon that is designed to release radiation or radioactivity at a level dangerous to human life.” Cyber and biotechnology weapons are not covered under section 2332a, or the current definition of a destructive device under (18 U.S.C. §921; however, due to their capability to cause a high order of destruction or causing mass casualties, both should remain under ongoing review for threat reduction. Similarly, improvised weapons which include modified weapons and munitions; improvised explosive devices (IEDs); and improvised CBRN, including chemical, biological, or radiological enhancements, should remain under review as these weapons can incorporate enhanced or destructive payloads and fillers designed to kill, destroy, incapacitate, harass, or distract. Countering weapons of these types entails activities across the United States Government (USG) to ensure the United States, its Armed Forces, allies, partners, and interests are not attacked or coerced by actors of concern possessing these capabilities.

With the return of great power competition and the lessons that history has taught us about the continuing evolution of threats of the type described above, I am tasking the Defense Science Board (DSB), through the establishment of the Defense Science Board Permanent Subcommittee on Threat Reduction (“the DSB Permanent Subcommittee”), to examine on an ongoing basis how effectively the Department of Defense (DoD) is – or should be – deterring, countering, and mitigating such threats against the nation, its military forces, and allies. The DSB Permanent Subcommittee should assess the current landscape and provide recommendations and findings on:

- Reducing the threat posed by chemical, biological, biotechnological, radiological, nuclear, improvised, cyber, and special weapons capable of a high order of destruction or causing mass casualties;
- Identifying and countering novel or emerging, asymmetric, unconventional and unorthodox threats that employ novel, irregular, disruptive, and potentially catastrophic effects;
- Improving and modernizing operations to counter threats posed by conventional

or unconventional weapons including deterrence, non-proliferation, counterproliferation, and consequence management;

- Improving and modernizing barriers to the acquisition, proliferation, and use of chemical, biological, biotechnological, radiological, nuclear, improvised, cyber, and other special weapons;
- Other Research and Engineering, Acquisition and Sustainment, and United States Special Operations Command mission-related matters as requested by the Under Secretary of Defense for Research and Engineering (USD(R&E)).

The DSB Permanent Subcommittee findings, observations, and recommendations will be presented to the full DSB for its thorough, open discussion and deliberation at a properly noticed and public meeting subject to Government in the Sunshine Act requirements. The DSB will provide its findings and recommendations to the USD(R&E) as the Sponsor of the DSB. The nominal start date of the study period will be within 30 days of the initial appointment of the DSB Permanent Subcommittee members.

I will be the sponsor of the DSB Permanent Subcommittee. The DSB Permanent Subcommittee members are granted access to those DoD officials and data necessary for the appropriate conduct of their studies. As such, the Office of the Secretary of Defense and Component Heads are requested to cooperate and promptly facilitate requests by DSB staff regarding access to relevant personnel and information deemed necessary, as directed by paragraphs 5.1.8. and 5.3.4. of DoD Instruction 5105.04, "Department of Defense Federal Advisory Committee Management Program," and in conformance with applicable security classifications.

The DSB and the DSB Permanent Subcommittee will operate in accordance with the provisions of the Federal Advisory Committee Act (5 United States Code (USC), Appendix), the Government in the Sunshine Act (5 U.S.C. §552b, and other applicable federal statutes, regulations, and policy. Individual DSB and DSB Permanent Subcommittee members do not have the authority to make decisions or recommendations on behalf of the DSB nor report directly to any Federal representative. The members of the DSB and the DSB Permanent Subcommittee are subject to certain Federal ethics laws governing conflicts of interest, including 18 USC § 208, and the Standards of Ethical Conduct regulations in 5 Code of Federal Regulations (CFR) Part 2635.



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