Coalition for
National Security Research

Testimony for the Record

Submitted to the United States Senate Committee on Appropriations

Hearing on "Driving Innovation Through Federal Investments"

April 29, 2014

By

Coalition for National Security Research

The Coalition for National Security Research (CNSR) is pleased to submit testimony for the April 29, 2014 hearing on "Driving Innovation through Federal Investments." We thank Chairwoman Mikulski and Vice Chairman Shelby for holding this hearing, which provides a critical opportunity to articulate how federal investments in defense research drive innovation not only for our armed forces but for our national economy. We also wish to thank the Executive Branch witnesses for their testimony today and, in particular, acknowledge DARPA Director Arati Prabhakar for her leadership and vision for this agency.

CNSR is a broadly-based coalition of industry, research universities, non-profit institutes, and associations united by a commitment to a strong Defense S&T base. We are drawn together by the common belief in the critical role Defense Science and Technology (S&T) programs play in the Department's ability to navigate the challenges of modern warfare with a leaner fighting force, develop innovative therapies for wounded soldiers, and the ability to avoid strategic surprise.

While we understand that tough fiscal choices need to be made, we are disappointed that the Department of Defense's Fiscal Year 2015 budget request proposes reductions to these important programs. CNSR urges Congress to change the course of any potential downward trajectory and provide: $12.389 billion for overall S&T accounts, and $2.23 billion for the 6.1 basic research accounts. This level of funding would also provide increased investments for the 6.2 applied and 6.3 advanced technology development programs.

The FY 2015 level of funding provided in the Pentagon's budget request significantly slows progress of the DoD S&T portfolio towards two important benchmarks: establishing the level of 6.1 basic research funding to equal 20 percent of the total S&T budget over a period of sustained and predictable growth, and establishing the level of S&T funding to equal 20 percent of the total Research, Development, Technology & Evaluation (RDT&E) budget. This threshold reflects the federal actions that were recommended in the National Academies' 2007 report *Rising Above the Gathering Storm* and will serve to sustain robust funding for DOD basic research for the long term.

The recently released 2014 Quadrennial Defense Review (QDR) reiterates the 21st century defense priorities outlined in the 2012 Defense Strategic Guidance, including "to protect and prioritize key investments in technology while our forces overall grow smaller and leaner." The QDR also notes the goal to "sustain priority investments in science, technology, research, and development both within the defense sector and beyond." Unfortunately, the Pentagon's FY 2015 budget request runs counter to these stated goals, by proposing a 5.5% reduction for overall S&T programs and a nearly 7% reduction for 6.1 basic research programs.

The DoD S&T portfolio is the incubator for the next generation of defense technologies that will maintain our military superiority and increase the capabilities of warfighters during a time of transformation and reduced forces. The 6.1 basic research accounts support the long-term scientific discovery that provides the foundational knowledge for new technologies. The 6.2 applied research accounts refine discoveries by exploring and determining the operational parameters and practicality of the technology to military needs. The 6.3 advanced technology development accounts support the creation of larger-scale hardware and technology to be tested in realistic environments.

CNSR also notes the important role the Defense Advanced Research Projects Agency (DARPA) has played in funding high-risk research that has led to many of the extraordinary, historical technological advances of our day. CNSR urges Congress to acknowledge the important role this agency plays in dealing with both near-term needs and the game-changing technologies of the future by supporting the proposed request for DARPA of $2.91 billion.

In addition to these critical S&T research accounts, CNSR urges Congress to provide sufficient funding for DoD S&T programs critical to cultivating the next generation of talented engineers and scientists who will contribute to the technological capabilities of the American military. In addition to graduate research assistantships and postdoctoral fellowships that are supported by research grants, programs such as the National Defense Science and Engineering Graduate Fellowship Program and the National Defense Education Program – which includes the Science, Mathematics and Research for Transformation Scholarship, and the National Security Science and Engineering Faculty Fellowship Program – provide education and research opportunities that strengthen our nation's scientific and technical workforce.

In closing, we again thank you for holding this critically important hearing and affording us the opportunity to weigh in. We can think of no more important topic for this Committee to explore than the role of federal investments in defense and non-defense research. We look forward to working with the Committee to ensure these critical investments continue to be made.