

## United States Senate

February 22, 2018

James Mattis  
Secretary of Defense  
Department of Defense  
1400 Defense Pentagon  
Washington, DC 20301

Dear Secretary Mattis,

I write regarding the 2018 Missile Defense Review (MDR). As the Department of Defense (DOD) drafts this document to operationalize President Trump's support for a layered missile defense system, I strongly encourage DOD to recommend the development and eventual deployment of a space-based missile defense layer.<sup>i</sup>

Due to our investments in ground- and sea-based systems, the United States currently possesses the capability to intercept ballistic missiles in the midcourse and terminal phases of flight. The progress DOD and the Missile Defense Agency have made since President Reagan's visionary leadership in 1983 is a source of pride and security to all Americans.<sup>ii</sup> Even so, I remain concerned that we have not developed or fielded the requisite capabilities to intercept ballistic missiles in their most vulnerable stage of flight.

DOD has long recognized the benefits of interception during boost phase, when a ballistic missile is traveling its slowest, emitting its clearest heat signature, and unable to deploy countermeasures. I commend and support the initiative President Trump has demonstrated in his Fiscal Year 2019 budget of utilizing unmanned areal vehicles and directed energy for boost phase intercept, but this alone is not sufficient.<sup>iii</sup> In order to credibly reinforce deterrence in the twenty-first century, America must deploy a space-based intercept (SBI) layer that can look down on the ascending threat from the moment of launch, feed information in real-time, and engage the ascending missile during boost phase. This will present more time and intercept opportunities to the United States.

In 2011, a congressionally-mandated study from the Institute for Defense Analysis found that a space-based interceptor layer could contribute to homeland defense, fulfill a boost phase intercept mission, defend against intercontinental ballistic missiles from North Korea and Iran, defend aircraft carriers from anti-ship ballistic missiles, be developed within ten years, and defend against antisatellite weapons.<sup>iv</sup> Given the metastasizing nuclear threat from North Korea, Iran's pursuit of atomic weapons, the growing development of anti-access/area denial capabilities in the Persian Gulf and the South China Sea, and great power competition in space, the case for urgently pursuing a space-based intercept capability has never been stronger. Recent investments from China and Russia in missile technology like hypersonic glide vehicles that circumvent our current missile defense architecture further underscore the potential value of a space-based layer for boost phase.

I am pleased to see the coordinated focus of this Administration on strengthening our layered missile defenses, as well as its clear-eyed understanding of space. The 2018 National Defense Strategy (NDS) identifies key capabilities that must be modernized to address evolving threats, specifically calling for investments on layered missile defenses and disruptive capabilities for both theater missile threats and North Korean ballistic missile threats.<sup>v</sup> Furthermore, the 2018 Nuclear Posture Review (NPR) highlights the need for resilient capabilities, declaring “space is no longer a sanctuary and orbital space is increasingly congested, competitive, and contested. A number of countries, particularly China and Russia, have developed the means to disrupt, disable, and destroy U.S. assets in space.”<sup>vi</sup>

We must recognize the inextricable link between our evolving conception of space and bolstering our layered missile defense architecture. Last year I authored language that was adopted into the Senate’s FY2018 National Defense Authorization Act (NDAA), stating that it is a matter of U.S. policy to utilize an integrated system of assets in space for defense of the homeland.<sup>vii</sup> The best way to operationalize this policy is developing and deploying a space-based interceptor layer.

As a matter of statute, this is contingent upon recommendations of the Department’s forthcoming Missile Defense Review.<sup>viii</sup> Therefore, I respectfully request you consider SBI’s inclusion in the 2018 MDR. Thank you for your attention to this critical matter.

Sincerely,



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Ted Cruz  
United States Senator

CC: John Rood, Under Secretary of Defense for Policy  
Lt. Gen. Samuel A. Greaves, Director of Missile Defense Agency

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<sup>i</sup> National Security Strategy of the United States of America, December 2017, p. 4, <https://www.whitehouse.gov/wp-content/uploads/2017/12/NSS-Final-12-18-2017-0905.pdf>.

<sup>ii</sup> Ronald Reagan, “Address to the Nation on Defense and National Security,” March 23, 1983, <https://www.reaganlibrary.gov/sites/default/files/archives/speeches/1983/32383d.htm>.

<sup>iii</sup> Missile Defense Agency Fiscal Year 2019 Budget Estimates, February 12, 2018, p. 11, <https://www.mda.mil/global/documents/pdf/budgetfy19.pdf>.

<sup>iv</sup> Institute for Defense Analysis, Response to Questions on the IDA Congressionally-mandated study of Space Based Interceptor Element of the Ballistic Missile Defense System, June 22, 2011.

<sup>v</sup> Summary of the 2018 National Defense Strategy of the United States of America, January 2018, p. 6, <https://www.defense.gov/Portals/1/Documents/pubs/2018-National-Defense-Strategy-Summary.pdf>

<sup>vi</sup> Nuclear Posture Review, February 2018, p. 57, <https://media.defense.gov/2018/Feb/02/2001872886/-1/-1/1/2018-NUCLEAR-POSTURE-REVIEW-FINAL-REPORT.PDF>

<sup>vii</sup> S.1519, National Defense Authorization Act for Fiscal Year 2018, Sec. 1605, <https://www.congress.gov/bills/115th-congress/senate-bill/1519/text>.

<sup>viii</sup> H.R. 2810, National Defense Authorization Act for Fiscal Year 2018, Sec. 1688, <https://www.congress.gov/bills/115th-congress/house-bill/2810/text#toc-H9BD67B34D1094499B3B2CF7B0C61A8E5>.