



**PHYSICISTS COALITION
FOR NUCLEAR
THREAT REDUCTION**

Physicists Coalition's Steering Committee Calls on Congress to Not Fund the "Golden Dome"

On January 27, 2025, President Trump issued an [executive order](#) mandating development, without any feasibility assessment, of a hugely expensive, unrealistic, and counterproductive missile defense system. Initially called "Iron Dome for America," it was subsequently renamed "Golden Dome." The executive order requires the Secretary of Defense to develop a plan to defend the United States against "ballistic, hypersonic, advanced cruise missiles, and other next-generation aerial attacks from peer, near-peer, and rogue adversaries" and specifically to include space-based interceptors capable of boost-phase intercept.

The proposed "Golden Dome" is technically infeasible. According to a recent report by the American Physical Society (APS) on the potential ability of current and proposed systems to defend the United States against nuclear-armed intercontinental ballistic missiles (ICBMs), "Due to its fragility to countermeasures, and the inability to expand it readily or cost-effectively, the current midcourse intercept system cannot be expected to provide a robust or reliable capability against more than the simplest attacks by a small number of relatively unsophisticated missiles within the 15-year time horizon". According to the APS study, a space-based system of interceptors that would have even the theoretical ability to defend the continental United States against a salvo of 10 relatively simple solid-propellant ICBMs and avoid being spoofed would have to have about 40,000 interceptors and could be defeated or destroyed relatively easily.

The proposed "Golden Dome" would be enormously expensive. Attempting to build a comprehensive system such as the proposed "Golden Dome" would be enormously expensive. The Congressional Budget Office has estimated that the 20-year cost just for a minimal system of space-based interceptors that could theoretically counter 1 or 2 ICBMs would be about \$540 billion. The American Enterprise Institute has recently estimated that pursuing a comprehensive system like the proposed "Golden Dome" would cost \$4.4 trillion over 20 years.

The proposed "Golden Dome" will fuel a new nuclear arms race. The "Golden Dome" initiative is a departure from the long-held bipartisan consensus that strategic missile defenses could at best counter a small number of simple missiles launched by a state such as North Korea, and that the strategic arsenals of China and Russia would be countered by nuclear and conventional deterrence. Even though pursuing a system like the proposed "Golden Dome" will waste enormous amounts of money on inherently ineffective systems, pursuing it is likely to provoke responses from potential adversaries, who are likely to build more anti-satellite weapons, nuclear weapons and novel delivery systems that will reduce U.S. security. It will also reduce U.S. security by impeding efforts to achieve nuclear arms reductions.

Given the "Golden Dome" strategic missile defense program's infeasibility and its enormous cost, and the fact that it would fuel a new nuclear arms race, **we urge Congress to not fund this initiative.**

The Steering Committee of The Physicists Coalition for Nuclear Threat Reduction

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