

GAO Highlights

Highlights of [GAO-24-106315](#), a report to congressional committees

Why GAO Did This Study

According to DOD, potential adversaries are expanding and enhancing their missile capabilities to attack the U.S., while current U.S. interceptors approach the end of their planned service life. To address this challenge, DOD has stated that it needs to begin fielding the NGI by 2028. To assist in this effort, MDA plans to use virtual tools and software to increase the program's efficiency.

Congress included a provision in statute for MDA to annually report on the status of NGI's development goals, cost, and stakeholder reviews and for GAO to assess NGI's acquisition progress. This report addresses the extent to which MDA (1) made progress in developing NGI, (2) addressed significant NGI technical risks, and (3) implemented a virtual environment to facilitate NGI development.

GAO reviewed DOD documents and independent risk, cost, and test assessments and interviewed DOD officials. GAO conducted site visits to observe construction of NGI's launch facility and key supporting radars.

What GAO Recommends

GAO is making five recommendations to DOD, including to regularly coordinate with stakeholders regarding MDA's threat requirements, ensure performance simulations fully represent the environment NGI is expected to operate in, and periodically assess efforts to implement a virtual environment. DOD agreed with one recommendation but did not agree with the other four. GAO maintains that all of the recommendations are valid, as discussed in this report.

View [GAO-24-106315](#). For more information, contact Jon Ludwigson at (202) 512-4841 or LudwigsonJ@gao.gov.

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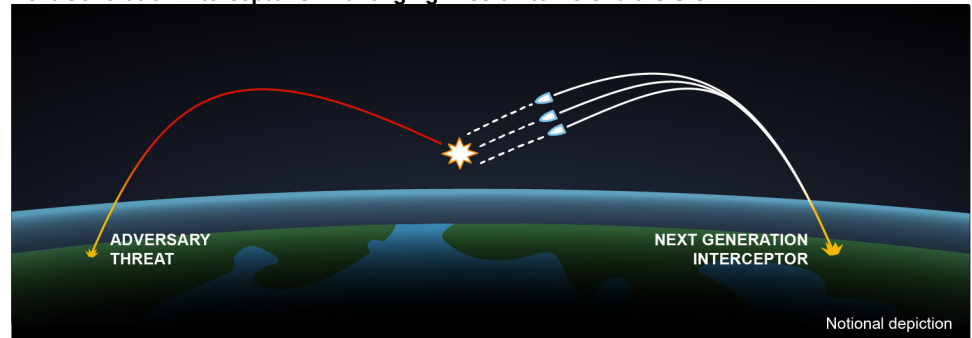
MISSILE DEFENSE

Next Generation Interceptor Program Should Take Steps to Reduce Risk and Improve Efficiency

What GAO Found

The Missile Defense Agency (MDA) is developing a new system—the Next Generation Interceptor (NGI)—to defend the U.S. against complex missile attacks (see figure). The Department of Defense (DOD) tasked MDA with expediting the system's development and fielding interceptors starting in 2028.

Next Generation Interceptor's Challenging Mission to Defend the U.S.



Source: GAO analysis of Missile Defense Agency information. | GAO-24-106315

The NGI program is on track to start product development in 2024 but the program is planning to overlap design and production activities to accelerate flight testing. Any major design issues could disrupt this strategy. Further, the schedule for NGI is already optimistic when compared to development timeframes of similar weapon systems and MDA's history of unmet testing goals, as GAO reported in May 2023 ([GAO-23-106011](#)). NGI's costs have also increased by hundreds of millions of dollars, but the program is still within planned funding levels. MDA officials expect further increases due to supply chain issues and rising material costs.

In 2022, DOD's independent review identified multiple high-risk items and actions MDA could take to reduce technical risk. MDA disagreed with key aspects of the risk assessment and, to date, has taken limited steps to mitigate these risks. For example:

- MDA has not fully addressed directions from DOD officials regarding updating NGI's threat-related performance requirements, monitoring and reporting threat changes, and collaborating with stakeholders.
- MDA intends to make key acquisition decisions based on NGI performance simulations that do not fully represent how the warfighter intends to use the system—a necessary step to verify NGI designs are sufficiently mature and will meet performance requirements.

By not addressing these risks in a timely manner, MDA is increasing the potential for later discovering performance shortfalls that could delay the program.

MDA made some initial progress establishing a virtual environment to enable collaboration on NGI development. However, MDA encountered challenges and is not periodically assessing implementation progress, as it had planned. Doing so could help MDA identify potential efficiencies to achieve its fielding deadline.