

GAO@100 Highlights

Highlights of [GAO-21-105249](#), a report to congressional committees

Why GAO Did This Study

The U.S. Space Force plans to spend around \$14.4 billion over the next 5 years to develop the Next Gen OPIR system, comprised of satellites and a ground system to detect and track missiles, among other things. The Air Force experienced significant problems when it developed the predecessor to Next Gen OPIR—it was roughly 9 years late and cost more than three times its initial estimate.

A report to the National Defense Authorization Act for Fiscal Year 2019 contained a provision for GAO to review Next Gen OPIR efforts. This report (1) identifies the challenges Next Gen OPIR acquisition efforts face and the extent to which the Space Force is addressing them, and (2) assesses the extent to which Next Gen OPIR capabilities will address missions supported by the current system. GAO reviewed program documentation, acquisition strategies, and Air Force and DOD acquisition guidance, and interviewed DOD officials. GAO assessed this information against acquisition and collaboration best practices. Information that DOD deemed to be sensitive has been omitted.

What GAO Recommends

GAO recommends that the Space Force provide congressional committees more transparent cost and schedule risk information for Next Gen OPIR, and that DOD formalize coordination across agencies. DOD partially concurred with both recommendations. Regarding the first, GAO believes DOD's plan will meet the intent of the recommendation; on the second, GAO maintains the importance of formalizing coordination.

View [GAO-21-105249](#). For more information, contact Jon Ludwigson at (202) 512-4841 or ludwigsonj@gao.gov.

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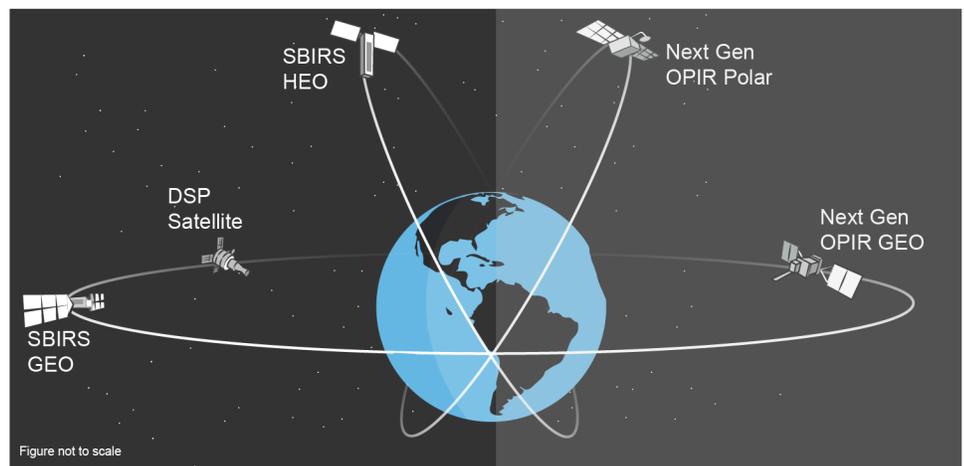
MISSILE WARNING SATELLITES

Comprehensive Cost and Schedule Information Would Enhance Congressional Oversight

What GAO Found

The U.S. defense and intelligence communities depend on data from overhead persistent infrared sensors. These sensors provide early warning of ballistic missile launches and contribute to other defense and intelligence missions. The planned Next Generation Overhead Persistent Infrared (Next Gen OPIR) system is intended to replace the Space Based Infrared System, which began in the mid-1990s. The Space Force plans to launch the first of five Next Gen OPIR satellites in 2025. The figure below presents a notional depiction of current and planned OPIR systems.

Notional Depiction of Current and Planned OPIR Satellite Orbits



Next Gen OPIR Next Generation Overhead Persistent Infrared
DSP Defense Support Program
GEO Geosynchronous Earth Orbit
HEO Highly Elliptical Orbit
SBIRS Space Based Infrared System

Source: GAO analysis of Department of Defense information and depiction of © 2007 Lockheed Martin Corporation, All Rights Reserved. | GAO-21-105249

Despite early steps to speed up development, the Next Gen OPIR program faces significant technical and managerial challenges—such as developing a new mission payload and serving as the lead system integrator for the first time in this area—that are likely to delay the initial launch. Significant schedule delays typically result in cost increases. Although officials are aware of schedule risks, they continue to present an on-track timeline and stable cost estimates in reports to congressional committees. More transparency in schedules and costs would contribute to better Department of Defense (DOD) and congressional oversight and decision-making.

The first Next Gen OPIR satellites are intended to provide missile warning capabilities and support other mission partners. DOD has initiated multi-agency efforts to determine how to meet future needs. However, coordination mechanisms are not formalized. Without documenting roles, responsibilities, and plans, DOD risks ineffective collaboration and unsynchronized delivery of warfighter capabilities.