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POLAR-ORBITING OPERATIONAL ENVIRONMENTAL SATELLITES

Restructuring Is Under Way, but Challenges and Risks Remain

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Highlights

Highlights of GAO-07-910T, a testimony before the Subcommittee on Energy and Environment, House Committee on Science and Technology

Why GAO Did This Study

The National Polar-orbiting Operational Environmental Satellite System (NPOESS) is a tri-agency acquisition—managed by the Departments of Commerce and Defense and the National Aeronautics and Space Administration—which experienced escalating costs, schedule delays, and technical difficulties. These factors led to a June 2006 decision to restructure the program thereby decreasing its complexity, increasing its estimated cost to $12.5 billion, and delaying the first two satellites by 3 to 5 years.

GAO was asked to summarize a report being released today that (1) assesses progress in restructuring the acquisition, (2) evaluates progress in establishing an effective management structure, and (3) identifies the status and key risks on the program's major segments.

What GAO Recommends

In its report, GAO recommends that the appropriate executives approve key acquisition documents, the Secretary of Defense delay reassigning the Program Executive, and the Secretary of Commerce ensure that program authorities identify and address staffing needs. Agency officials agreed with all of the recommendations except delaying the Program Executive's reassignment. GAO believes that proceeding with this reassignment would increase program risks.

www.gao.gov/cgi-bin/getrpt?GAO-07-910T.

To view the full product, click on the link above. For more information, contact David A. Powner, (202) 512-9286 and pownerd@gao.gov.

What GAO Found

The NPOESS program office has made progress in restructuring the acquisition by establishing and implementing interim program plans guiding contractors' work activities in 2006 and 2007; however, important tasks remain to be done. Executive approvals of key acquisition documents are about 9 months late—due in part to the complexity of navigating three agencies' approval processes. Delays in finalizing these documents could hinder plans to complete contract negotiations by July 2007 and could keep the program from moving forward in fiscal year 2008 with a new program baseline.

The program office has also made progress in establishing an effective management structure by adopting a new organizational framework with increased oversight from program executives and by instituting more frequent and rigorous program reviews; however, plans to reassign the recently appointed Program Executive Officer will likely increase the program's risks. Additionally, the program lacks a process and plan for identifying and filling staffing shortages, which has led to delays in key activities such as cost estimating and contract revisions. As of June 2007, key positions remain to be filled.

Development and testing of major NPOESS segments—including key sensors and ground systems—are under way, but significant risks remain. For example, while work continues on key sensors, two of them—the visible/infrared imager radiometer suite and the cross-track infrared sounder—experienced significant problems and are considered high risk (see table). Continued sensor problems could cause further cost increases and schedule delays. Additionally, while progress has been made in reducing delays in the data processing system, work remains in refining the algorithms needed to translate sensor observations into usable weather products. Given the tight time frames for completing this work, it will be important for program officials and executives to continue to provide close oversight of milestones and risks.

Key NPOESS Components and Corresponding Risk Levels

NPOESS component	Risk level
Visible/infrared imager radiometer suite	High
Cross-track infrared sounder	High
Ozone mapper/profiler suite	Moderate
Advanced technology microwave sounder	Low
Command, control, and communications system	Low
Interface data processing system	Moderate

Source: GAO analysis of NPOESS Integrated Program Office data.