



Highlights of [GAO-08-18](#), a report to congressional requesters

Why GAO Did This Study

The Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA), with the aid of the National Aeronautics and Space Administration (NASA), plans to procure the next generation of geostationary operational environmental satellites, called the Geostationary Operational Environmental Satellites-R series (GOES-R). This series is considered critical to the United States’ ability to maintain the continuity of data required for weather forecasting through the year 2028.

GAO was asked to (1) assess the status and plans for GOES-R, and (2) evaluate whether NOAA is adequately mitigating key technical and programmatic risks. To do so, GAO analyzed contractor and program data and interviewed officials from NOAA and NASA.

What GAO Recommends

GAO is making recommendations to the Secretary of Commerce to ensure that the GOES-R program effectively manages and mitigates risks. The Secretary agreed with GAO’s recommendations to use a program level risk list and to add selected risks to its list, but disagreed that NOAA has insufficient insight into NASA’s contracts. The Secretary cited an unparalleled transparency between the two agencies. However, NOAA has not demonstrated that it has validated NASA’s contractor performance and GAO remains concerned that NOAA lacks the capability to oversee this key aspect of the program.

To view the full product, including the scope and methodology, click on [GAO-08-18](#). For more information, contact David A. Powner at (202) 512-9286 or pownerd@gao.gov.

GEOSTATIONARY OPERATIONAL ENVIRONMENTAL SATELLITES

Progress Has Been Made, but Improvements Are Needed to Effectively Manage Risks

What GAO Found

NOAA has made progress in planning its GOES-R procurement—which is estimated to cost \$7 billion and scheduled to have the first satellite ready for launch in 2014—but cost and schedules are likely to grow. Specifically, the agency completed preliminary design studies of GOES-R and recently decided to separate the space and ground elements of the program into two separate development contracts. However, this change in the GOES-R acquisition strategy has delayed a decision to proceed with the acquisition. Further, independent estimates are higher than the program’s current cost estimate and convey a low level of confidence in the program’s schedule. Independent studies show that the estimated program could cost about \$2 billion more, and the first satellite launch could be delayed by 2 years. As NOAA works to reconcile the independent estimate with its own program office estimate, costs are likely to grow and schedules are likely to be delayed.

To address cost, schedule, and technical risks, the GOES-R program has established a risk management program and has taken steps to mitigate selected risks. For example, as of July 2007, the program office identified the lack of an integrated master schedule to be its highest priority risk and established plans to bring this risk to closure. However, more remains to be done to fully address GOES-R risks. Specifically, the program has multiple risk watchlists that are not always consistent and key risks are missing from the watchlists, including risks associated with unfilled executive positions, limitations in NOAA’s insight into NASA’s deliverables, and insufficient funds for unexpected costs—called management reserves (see table for more details). As a result, the GOES-R program is at risk that problems will not be identified or mitigated in a timely manner and could lead to program cost overruns and schedule delays.

Description of Key Risks Missing from GOES-R Risk Lists

Key Risk	Description
Unfilled GOES-R executive leadership positions	Two senior GOES-R program positions—the system program director and deputy system program director—are currently filled by NASA and NOAA personnel in an acting capacity until they can be permanently filled by NOAA. The agency reported that it plans to fill the deputy system program director role in the near future, but noted that it could take more than 6 months to fill the system program director role.
Limitations in NOAA’s insight into NASA’s deliverables	The established NOAA/NASA interagency agreements do not contain provisions that enable NOAA to ensure that monthly contractor data and reports, submitted by NASA, are reliable and that they accurately depict contractor performance.
Insufficient management reserve (for unexpected costs) held by the program and a critical instrument contractor	As of May 2007, the contractor for a critical instrument—the Advanced Baseline Imager—had less than 1 percent of funding in reserve to cover unexpected costs associated with the 40 percent of work left to be completed. In addition, as a result of addressing issues on the Advanced Baseline Imager in March 2007, the reserve funding for the overall GOES-R program dropped below 25 percent—a level that NOAA reported it intended to establish as a lesson learned from other satellite acquisitions. As of July 2007, the reserve level was at about 15 percent.

Source: GAO analysis.