



Highlights of [GAO-09-596T](#), a testimony before the Subcommittee on Energy and Environment, Committee on Science and Technology, House of Representatives

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 Satellite-R series (GOES-R). GOES-R is to replace the current series of satellites, which will likely begin to reach the end of their useful lives in 2014. 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 summarize its report being released today that (1) determines the status of the GOES-R program, (2) evaluates whether plans for the acquisition address problems experienced on similar programs, and (3) determines whether NOAA’s plan will be adequate to support current data requirements.

What GAO Recommends

In its report, GAO recommended that the program take steps to improve management and oversight and determine whether and how to recover certain capabilities that were removed from the program. In comments on a draft of this report, the Acting Secretary of Commerce agreed with GAO’s recommendations and stated that the agency plans to implement them.

To view the full product, including the scope and methodology, click on [GAO-09-596T](#). For more information, contact David A. Powner, (202) 512-9286, pownerd@gao.gov.

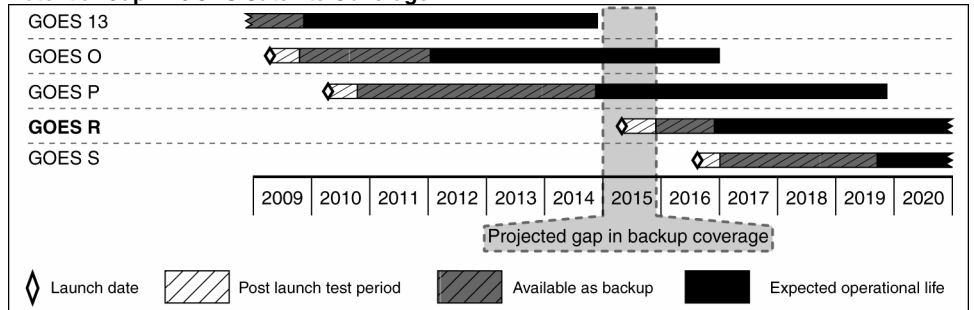
GEOSTATIONARY OPERATIONAL ENVIRONMENTAL SATELLITES

Acquisition Has Increased Costs, Reduced Capabilities, and Delayed Schedules

What GAO Found

NOAA has made progress on the GOES-R acquisition, but the program’s cost, schedule, and scope have changed. The GOES-R program has awarded development contracts for key instruments and plans to award contracts for the spacecraft and ground segments by mid-2009. However, after reconciling program and independent cost estimates, the program established a new cost estimate of \$7.67 billion—a \$670 million increase from the prior \$7 billion estimate. The program also reduced the number of products the satellites will produce from 81 to 34 and slowed the delivery of these products in order to reduce costs. More recently, the program also delayed key milestones, including the launch of the first satellite, which will likely be delayed from December 2014 until at least May 2015. This delay in the GOES-R launch runs counter to NOAA’s policy of having a backup satellite in orbit at all times and could lead to gaps in satellite coverage if GOES-O or P fail prematurely (see graphic below).

Potential Gap in GOES Satellite Coverage



Source: GAO analysis of NOAA data.

GOES-R has taken steps to address lessons from other satellite programs, but important actions remain to be completed. These actions include ensuring sufficient technical readiness of the system’s components prior to key decisions. However, technical challenges remain on the ground segment and instruments, the program did not perform a comprehensive review after rebaselining a critical instrument, and it has not documented all of the reasons for cost overruns. Until these issues are addressed, NOAA faces an increased risk that the GOES-R program will repeat the same mistakes that have plagued other satellite programs.

While NOAA and the science community expressed a continuing need for advanced products that were removed from the program, the agency has not developed plans or a timeline for meeting these requirements. Until a decision is made on whether and how to proceed in providing the advanced products, key system users, such as weather forecasters, will not be able to meet their goals for improving the accuracy of severe weather warnings.