

Highlights of GAO-04-1054, a report to Subcommittee on Environment, Technology, and Standards, Committee on Science, House of Representatives

Why GAO Did This Study

Our nation's current operational polar-orbiting environmental satellite program is a complex infrastructure that includes two satellite systems, supporting ground stations, and four central data processing centers. In the future, the National Polar-orbiting Operational Environmental Satellite System (NPOESS) is to combine the two current satellite systems into a single state-of-theart environment monitoring satellite system. This new satellite system is considered critical to the United States' ability to maintain the continuity of data required for weather forecasting and global climate monitoring through the year 2020. Because of changes in funding levels after the contract was awarded, the program office recently developed a new cost and schedule baseline for NPOESS.

GAO was asked to provide an interim update to (1) identify any cost or schedule changes as a result of the revised baseline and determine what contributed to these changes and (2) identify factors that could affect the program baseline in the future.

In commenting on a draft of this report, DOD, NOAA, and NASA officials generally agreed with the report and offered technical corrections, which we incorporated where appropriate.

www.gao.gov/cgi-bin/getrpt?GAO-04-1054.

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

POLAR-ORBITING ENVIRONMENTAL SATELLITES

Information on Program Cost and Schedule Changes

What GAO Found

The program office has increased the NPOESS cost estimate by \$1.2 billion, from \$6.9 to \$8.1 billion, and delayed key milestones, including the availability of the first NPOESS satellite—which was delayed by 20 months. The cost increases reflect changes to the NPOESS contract as well as increased program management costs. The contract changes include extension of the development schedule to accommodate changes in the NPOESS funding stream, increased sensor costs, and additional funds needed for mitigating risks. Increased program management funds were added for non-contract costs and management reserves. The schedule delays were the result of stretching out the development schedule to accommodate a change in the NPOESS funding stream.

Other factors could further affect the revised cost and schedule estimates. First, the contractor is not meeting expected cost and schedule targets of the new baseline because of technical issues in the development of key sensors. Based on its performance to date, GAO estimates that the contractor will most likely overrun its contract at completion in September 2011 by at least \$500 million. Second, the risks associated with the development of the critical sensors, integrated data processing system, and algorithms could also contribute to increased cost and schedule slips.

Polar-orbiting meteorological satellite Communications satellite Field terminal Ground station Data processing center Stored Real-time

Source: GAO, based on NPOESS Integrated Program Office data