



DEFENSE ACQUISITIONS

Improvements Needed in Space Systems Acquisition Management Policy

Highlights of [GAO-03-1073](#), a report to the Chairman, Subcommittee on Defense, Committee on Appropriations, House of Representatives

Why GAO Did This Study

The Department of Defense is spending nearly \$18 billion annually to develop, acquire, and operate satellites and other space-related systems. The majority of satellite programs that GAO has reviewed over the past 2 decades experienced increased costs and delayed schedules.

DOD has recently implemented a new acquisition management policy, which sets the stage for decision making on individual space programs. GAO was asked to assess the new policy.

What GAO Recommends

GAO is recommending that DOD modify its policy to separate technology development from product development and ensure decisions to start programs are based on sound criteria. DOD disagreed with our recommendations principally because it believes that implementing them will slow down acquisitions, increase risks, and prevent DOD from taking advantage of cutting edge technology. Our past reviews of best practices, however, have shown that risk and time are reduced and capability is increased when programs begin with knowledge that technologies can work as intended. DOD's policy for other weapon systems incorporates this view.

www.gao.gov/cgi-bin/getrpt?GAO-03-1073.

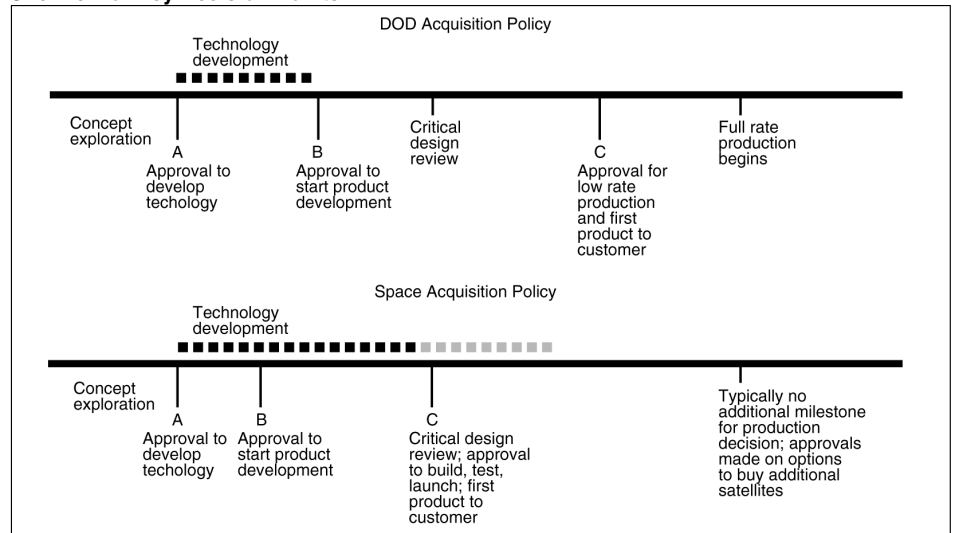
To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Schinasi at (202) 512-4841.

What GAO Found

DOD's new space acquisition policy may help provide more consistent and robust information on technologies, requirements, and costs. For example, the policy employs a new independent cost estimating process, independent program reviews performed by space experts not connected with the program, and more rigorous analyses of alternatives, requirements, and system interdependencies. This information may help decision-makers assess whether gaps exist between expectations and what the program can deliver.

However, the benefits that can be derived from these tools will be limited since the new policy does not alter DOD's practice of committing major investments before knowing what resources will be required to deliver promised capability. Instead, the policy encourages development of leading edge technology within product development, that is, at the same time the program manager is designing the system and undertaking other product development activities. As our work has repeatedly shown, such concurrency increases the risk that significant problems will be discovered as the system is integrated and built, when it is more costly and time-consuming to fix them. Moreover, when even one technology does not mature as expected, the entire program can be thrown off course since time and cost for invention cannot be reliably estimated. DOD's new acquisition policy for its other weapon systems recognizes these risks and consequently requires technology and product development to be done separately.

Overview of Key Decision Points



Source: GAO.

Note: According to DOD officials, while technology development is expected to ramp down during phase B, in some instances technology development could even continue after key decision point C or critical design review. Thus, technology development is depicted in a lighter shade after decision point C.