

Highlights of [GAO-08-1014](#), a report to congressional requesters

September 2008

## INFORMATION TECHNOLOGY

### FBI Is Implementing Key Acquisition Methods on Its New Case Management System, but Related Agencywide Guidance Needs to Be Improved

#### Why GAO Did This Study

The Federal Bureau of Investigation (FBI) is 3 years into its 6-year, \$451 million program known as Sentinel, which is to replace its antiquated, paper-based, legacy systems for supporting mission-critical intelligence analysis and investigative case management activities. Because of the importance of Sentinel to the bureau's mission operations, GAO was asked to conduct a series of reviews on the FBI's management of the program. This review focuses on whether the FBI is employing effective methods in acquiring commercial solutions for Sentinel. To do so, GAO researched relevant best practices; reviewed FBI policies and procedures, program plans, and other program documents; and interviewed appropriate program officials.

#### What GAO Recommends

To increase the chances of successfully delivering commercial component-based systems like Sentinel, GAO is recommending that the FBI revise its corporate policies and guidance to fully incorporate the following acquisition methods:

- requirements/commercial product trade-off analysis,
- commercial product dependency analysis,
- commercial product modification, and
- legacy system integration management.

The FBI concurred with GAO's findings and recommendations and stated that actions are underway and planned to address them.

To view the full product, including the scope and methodology, click on [GAO-08-1014](#). For more information, contact Randolph Hite (202) 512-3439 or [hiter@gao.gov](mailto:hiter@gao.gov).

#### What GAO Found

The FBI's Sentinel program is implementing five key methods for acquiring commercial information technology solutions. In particular, it is managing Sentinel requirements by making sure that changes to established baselines are justified and approved on the basis of costs, benefits, and risks, and it is ensuring that different levels of requirements and related design specification and test cases are properly aligned with one another. In addition, the bureau is analyzing commercially available product alternatives in relation to requirements, costs, and other factors to ensure that the most cost-effective mix of products is being used to minimize requirement gaps. In doing so, it is taking steps to understand the dependencies among the commercial products, thus ensuring that they can interoperate effectively. Also, the bureau is not modifying the commercial products that it is selecting and using to develop Sentinel, which should allow it to minimize future maintenance costs by taking advantage of future product releases and other vendor product support. Last, it is taking steps to ensure that Sentinel integration with FBI legacy systems will occur when needed, for example, by establishing agreements with legacy system owners. Collectively, implementation of these acquisition methods should increase the chances of cost effectively delivering required Sentinel capabilities on time.

However, the implementation of most of these acquisition methods is generally not governed by bureauwide policies and guidance that address all relevant practices (see table). To the credit of program officials, this void in corporate policies and guidance has not affected Sentinel, as they are implementing all of the key practices either through reliance on their prime contractor's approaches or through Sentinel-specific plans. If policies and guidance relative to each of these methods for acquiring commercial component-based systems were incorporated into FBI-wide policies and guidance, the bureau could increase its chances of employing them on a repeatable basis across all applicable system investments.

**Table: Extent to which FBI Has Defined and Sentinel Program Has Implemented Five Key Methods for Acquiring Commercial System Solutions**

Key methods	Defined in FBI policy/guidance	Implemented for Sentinel
Requirements management	Yes	Yes
Requirements/commercial product trade-off analysis	Partial	Yes
Commercial product dependency analysis	No	Yes
Commercial product modification	Partial	Yes
Legacy system integration management	Partial	Yes

Source: GAO analysis of FBI data.