**INFORMATION TECHNOLOGY REFORM**

**Agencies Need to Improve Certification of Incremental Development**

**Why GAO Did This Study**

Investments in federal IT too often result in failed projects that incur cost overruns and schedule slippages. Recognizing the severity of issues related to government-wide IT management, Congress enacted federal IT acquisition reform legislation in December 2014. Among other things, the law states that OMB require in its annual IT capital planning guidance that CIOs certify that IT investments are adequately implementing incremental development.

GAO was asked to review agencies’ use of incremental development. This report addresses the number of investments certified by agency CIOs as implementing adequate incremental development and any reported challenges, and whether agencies’ CIO certification policies and processes were in accordance with FITARA. GAO analyzed data for major IT investments in development, as reported by 24 agencies, and identified their reported challenges and use of certification information. GAO also reviewed the 24 agencies’ policies and processes for the CIO certification of incremental development and interviewed OMB staff.

**What GAO Found**

Agencies reported that 62 percent of major information technology (IT) software development investments were certified by the agency Chief Information Officer (CIO) for implementing adequate incremental development in fiscal year 2017, as required by the Federal IT Acquisition Reform Act (FITARA) as of August 2016. However, a number of responses for the remaining investments were incorrectly reported due to agency error. Officials from 21 of the 24 agencies in GAO’s review reported that challenges hindered their ability to implement incremental development, which included: (1) inefficient governance processes; (2) procurement delays; and (3) organizational changes associated with transitioning from a traditional software methodology that takes years to deliver a product, to incremental development, which delivers products in shorter time frames. Nevertheless, agencies reported that the certification process was beneficial because they used the information from the process to assist with identifying investments that could more effectively use an incremental approach, and using lessons learned to improve the agencies’ incremental processes.

As of August 2017, only 4 of the 24 agencies had clearly defined CIO incremental development certification policies and processes that contained: descriptions of the role of the CIO in the process; how the CIO’s certification will be documented; and included definitions of incremental development and time frames for delivering functionality consistent with Office of Management and Budget (OMB) guidance (see figure).

**What GAO Recommends**

GAO is making 19 recommendations to 17 agencies, including 3 to improve reporting accuracy and 16 to update or establish certification policies. Eleven agencies agreed with GAO’s recommendations, 1 partially agreed, and 5 did not state whether they agreed or disagreed. OMB disagreed with several of GAO’s conclusions, which GAO continues to believe are valid, as discussed in the report.

View GAO-18-148. For more information, contact David A. Powner at (202) 512-9286 or pownerd@gao.gov.

In addition, OMB’s fiscal year 2018 capital planning guidance did not establish how agency CIOs are to make explicit statements to demonstrate compliance with FITARA’s incremental provisions, while the 2017 guidance did. However, OMB’s fiscal year 2019 guidance provides clear direction on reporting incremental certification and is a positive step in addressing this issue.