Background

The United States Patent and Trademark Office (USPTO) relies on the performance of its information technology (IT) systems for managing its patent services. In fiscal year (FY) 2011, USPTO began its Patent End-to-End (PE2E) investment to replace and retire critical patent legacy systems. The initial investment budget was approximately $130.2 million, with completion planned for FY 2013. This upgrade extended through September 2020; with additional work through 2020, the total expenditure was $734 million. Over that period, USPTO planned to develop nine next-generation systems; however, three were developed and one was cancelled. USPTO deferred the development of the other five next-generation systems to retire eight legacy systems.

In response to the August 2018 outage of a critical PE2E component, USPTO initiated the "New Ways of Working" (NWOW) IT management strategy, transitioning from a milestone-focused project management approach to a customer-focused product management approach. USPTO also refined its Agile processes and implemented organizational changes to improve IT delivery. In September 2020, USPTO transferred the five deferred systems to product roadmaps under the NWOW and divided the PE2E investment into several Patent Product Line (PPL) investments.

Why We Did This Review

Our audit objective was to review USPTO's progress towards retiring its patent legacy systems.

UNITED STATES PATENT AND TRADEMARK OFFICE

USPTO Needs to Improve Its Cost Estimating, Scheduling, and Agile Practices to Timely Retire Patent Legacy Systems

OIG-22-026-A

WHAT WE FOUND

We found the following:

I. USPTO's cost estimating and scheduling processes are not comprehensive.

II. USPTO needs to improve Agile adoption practices when developing next-generation patent systems.

WHAT WE RECOMMEND

We recommend that the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office direct the Chief Information Officer to do the following:

1. Establish a life cycle cost estimate (LCCE) and integrated master schedule (IMS) for current and planned PPL investments.

2. Establish a training plan to ensure PPL team members and other appropriate personnel receive specialized training to develop and maintain an LCCE and IMS.

3. Establish contingency plans consistent with the National Institute of Standards and Technology's *Risk Management Framework, Systems and Services Acquisition*, for system components when support for the components is no longer provided by the manufacturer.

4. Establish processes and procedures to ensure all end-user feedback is properly captured, tracked, and timely communicated to the appropriate product teams during the product life cycle.

5. Establish a detailed plan to ensure PPL team members and other appropriate personnel receive specialized training in developing key performance indicators (KPIs) and revise existing KPIs to ensure they are comprehensive.

6. Establish policy, guidance, and leadership roles and responsibilities for the Agile Delivery Office (or equivalent successor).