TO : Robert S. Adler, Chairman, Acting
     Marietta Robinson, Commissioner
     Ann Marie Buerkle, Commissioner

FROM : Christopher W. Dentel
        Inspector General

SUBJECT : Follow-Up Audit of the CPSC’s Information Technology Investment Maturity

The Consumer Product Safety Improvement Act (CPSIA) calls for upgrades of the Commission’s information technology architecture and systems and the development of a database of publicly available information on incidents involving injury or death required under section 6A of the Consumer Product Safety Act, as added by section 212 of the CPSIA. It also calls for the Office of Inspector General to review the agency’s efforts in these areas.

In order to objectively assess the CPSC’s efforts in this area and to help provide the agency with a road map to meet the goals set out in the CPSIA this office chose to employ the Government Accountability Office’s (GAO) Information Technology Investment Maturity (ITIM) model framework. The ITIM framework is a maturity model composed of five progressive stages of maturity that an agency can achieve in its IT investment management capabilities. The maturity stages are cumulative; that is in order to attain a higher stage of maturity, the agency must have institutionalized all of the requirements for that stage in addition to those for all of the lower stages. The framework can be used to assess the maturity of an agency’s investment management processes as a tool for organizational improvement.

GAO’s ITIM maturity model framework offers organizations a road map for improving their IT investment management processes in a systematic and organized manner. These process improvements are intended to: improve the likelihood that investments will be completed on time, within budget, and with the expected functionality; promote better understanding and management of related risks; ensure that investments are selected based on their merits by a well-informed decision-making body; implement ideas and innovations to improve process management; and increase the business value and mission performance of investments.
In fiscal year 2011, under a contract monitored by the Office of Inspector General, Withum, Smith & Brown (WS+B), an independent certified public accounting firm, issued an audit report regarding the CPSC’s Information Technology (IT) investment management processes, using the Government Accountability Office’s (GAO) Information Technology Investment Management (ITIM) framework. This initial ITIM audit found that the CPSC had reached Stage 1 of the five-stage IT investment maturity model. WS+B outlined 11 specific actions that in their opinion the CPSC would need to accomplish to achieve maturity Stage 2. In fiscal year 2012 a follow-up ITIM audit was conducted by WS+B which found that the CPSC was still at Stage 1 of the five-stage IT investment maturity model as defined by the GAO. They also found that the CPSC had implemented most of the key practices and critical processes that constitute Stage 2. Based on their assessment, they outlined two specific actions that in their opinion the CPSC needed to perform to achieve maturity Stage 2.

Attached please find the second follow-up Performance Audit of the Information Technology Investment Maturity of the Consumer Product Safety Commission. This audit was also performed by WS+B under a contract monitored by the Office of Inspector General. In connection with the contract, we reviewed WS&B’s report and related documentation and inquired of its representatives. Our review, as differentiated from an audit in accordance with generally accepted government auditing standards, was not intended to enable us to express, and we do not express, an opinion on the matters contained in the report. WS+B is responsible for the attached auditor’s report. However, our review disclosed no instances where WS+B did not comply, in all material respects, with U.S. generally accepted government auditing standards.

In the current review, WS+B found that during the current audit period, the CPSC had not executed five of the key practices described in maturity Stage 2 that had been identified in the prior audit as having been executed. The CPSC had also executed one new key practice that had not been previously executed. Put another way, the agency lost ground in some areas, but gained ground in others. However, taken as a whole, the agency is still at the lowest level, maturity Stage 1.

Should you have any questions, please contact me at (301) 504-7644.

Christopher W. Dentel
Inspector General

Attached: Audit Report
U.S. CONSUMER PRODUCT SAFETY COMMISSION

Performance Audit of
Information Technology Investment Management

May 12, 2014
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May 12, 2014

Mr. Robert Adler
Acting Chairman, Consumer Product Safety Commission
4330 East West Highway
Bethesda, Maryland 20814

EXECUTIVE SUMMARY

We were engaged by the Consumer Product Safety Commission (CPSC), Office of Inspector General (OIG), to conduct a follow-up performance audit related to CPSC’s Information Technology (IT) investment management processes, using the Government Accountability Office’s (GAO) Information Technology Investment Management (ITIM) framework. We previously reported on our assessment of CPSC’s ITIM maturity in September 2012. In that report we concluded that CPSC had achieved Stage 1, and we recommended the Chairman of CPSC direct the Chief Information Officer (CIO) to ensure end users participate in project management throughout the project life cycle for all major investments, and to establish periodic business alignment review for ongoing IT projects.

The ITIM framework is a maturity model composed of five progressive stages of maturity that an agency can achieve in its information technology investment management capabilities. The maturity stages are cumulative; that is in order to attain a higher stage of maturity, the agency must have institutionalized all of the requirements for that stage in addition to those for all of the lower stages. The framework can be used to assess the maturity of an agency’s investment management processes as a tool for organizational improvement. For each maturity stage, the ITIM describes a set of critical processes (CP) that must be in place for the agency to achieve that stage.

This report presents the results of our work conducted to address the performance audit objectives as specified by the OIG. Our audit objectives were to perform a rigorous evaluation of CPSC’s IT investment management processes in order to determine which of the five progressive stages of maturity in IT investment management capabilities most accurately describes the CPSC’s ITIM framework, and to provide a road map that CPSC can follow to improve its processes. As our report further describes, we identified the following as a result of the work we performed:

CPSC had not executed five of the key practices described in Stage 2 during the current audit period that we had previously identified as being executed in our prior audit, but we found many of the other key practices described in Stage 2 of GAO’s ITIM hierarchy had been implemented. CPSC had also executed one new key practice that was not previously executed.
As a result, we have concluded that CPSC has reached Stage 1 of the five-stage ITIM maturity model, but had not completed the work necessary to achieve full Stage 2 maturity. Based on our assessment, we outlined three specific actions in the Observations section of our report that CPSC needs to perform to achieve Stage 2.

Our work was performed during the period September 2013 to April 2014. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives.

In response to our report, CPSC indicated it plans to take corrective actions on the recommendations in our report and outlined the specific steps it will take. CPSC’s complete response is included in Appendix D to this report.
OBSERVATIONS

Prior Assessment of CPSC
In our September 2012 report “Performance Audit of Information Technology Investment Management”, WS+B reported that CFSC had reached Stage 1 of the five stage investment maturity model as defined by the GAO, and that it had implemented most of the key practices and critical processes that constitute Stage 2. We outlined two specific actions that CPSC needed to perform to achieve Stage 2. We recommended the Chairman of the CPSC direct the CIO to ensure end users participate in project management throughout the project life cycle for all major investments, and to establish periodic business alignment review for ongoing IT projects.

GAO’s ITIM maturity model framework offers organizations a roadmap for improving their IT investment management processes in a systematic and organized manner. These process improvements are intended to:

- improve the likelihood that investments will be completed on time, within budget, and with the expected functionality;
- promote better understanding and management of related risks;
- ensure that investments are selected based on their merits by a well-informed decision-making body;
- implement ideas and innovations to improve process management; and
- increase the business value and mission performance of investments.

GAO’s ITIM is subdivided into a hierarchy. Each maturity stage consists of critical processes that are composed of a number of key practices. Each of the four maturity stages beyond Stage 1 is a plateau of well-defined critical processes. Each stage builds upon the lower stages and enhances an organization’s ability to manage its IT investments. The five maturity stages represent the steps toward achieving a mature, comprehensive ITIM process. Each critical process contains a set of key practices that, when fulfilled, implement the critical process needed to attain a given maturity stage. The key practices are the tasks that must be performed in order to implement and institutionalize a critical process effectively. The five maturity stages are as follows:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>Creating investment awareness</td>
</tr>
<tr>
<td>Stage 2</td>
<td>Building the investment foundation</td>
</tr>
<tr>
<td>Stage 3</td>
<td>Developing a complete investment portfolio</td>
</tr>
<tr>
<td>Stage 4</td>
<td>Improving the investment process</td>
</tr>
<tr>
<td>Stage 5</td>
<td>Leveraging IT for strategic outcomes</td>
</tr>
</tbody>
</table>

Stage 2 of the ITIM includes five critical processes:

<table>
<thead>
<tr>
<th>CP</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP-1</td>
<td>Instituting the Investment Review Board</td>
</tr>
<tr>
<td>CP-2</td>
<td>Meeting Business Needs</td>
</tr>
<tr>
<td>CP-3</td>
<td>Selecting an Investment</td>
</tr>
<tr>
<td>CP-4</td>
<td>Providing Investment Oversight</td>
</tr>
<tr>
<td>CP-5</td>
<td>Capturing Investment Information</td>
</tr>
</tbody>
</table>

\*GAO’s Information Technology Investment Management (ITIM): A Framework for Assessing and Improving Process Maturity (GAO-01-394G)
CPSC’s IT investment portfolio includes six investments, of which four have been defined as Major and two as Non-Major. Below is a summary of funding for these six investments:

<table>
<thead>
<tr>
<th>Description</th>
<th>FY 2011</th>
<th>FY 2012</th>
<th>FY 2013</th>
<th>FY 2014</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning, Development,</td>
<td>$ 9,908,000</td>
<td>$ 6,711,000</td>
<td>$ 6,210,000</td>
<td>$ 3,130,000</td>
<td>$25,959,000</td>
</tr>
<tr>
<td>Capital Spending</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operations and Maintenance</td>
<td>12,289,000</td>
<td>14,061,000</td>
<td>12,980,000</td>
<td>16,180,000</td>
<td>55,490,000</td>
</tr>
<tr>
<td>Total</td>
<td>$22,197,000</td>
<td>$20,772,000</td>
<td>$19,190,000</td>
<td>$19,290,000</td>
<td>$67,442,000</td>
</tr>
</tbody>
</table>

**Current Assessment of CPSC**

We performed a follow-up independent assessment of CPSC’s ITIM maturity under contract with CPSC’s Office of Inspector General (OIG). Based on our assessment, we noted that CPSC had satisfactorily completed Stage 1 and had implemented 33 of the 38 key practices within the five critical processes defined as Stage 2. The five key practices in Stage 2 that CPSC had not fully implemented:

A. **Instituting the Investment Review Board (IRB)**
   1. The IT investment board operates in accordance with its assigned authority and responsibility.
   2. The organization has established management controls to insure that the decisions of the IRB are carried out.

B. **Meeting Business Needs**
   3. The Investment Review Board evaluates the alignment of IT investments with CPSC’s strategic goals and objectives.

C. **Providing Investment Oversight**
   4. Using verified data, the IRB regularly reviews performance of IT projects against expectations.
   5. The IRB regularly tracks implementation of correction actions for each under-performing project until the actions are completed.

All five of these key practices we had identified as being executed by CPSC in our prior assessment. However, during the current audit period we noted the IRB did not meet regularly (the last meeting was held in May 2013). Additionally, we noted the IRB discontinued the use of the corrective action log in 2013 and no longer tracked the status of IRB decisions and corrective actions. The impact of the change in the IRB meetings and related activities resulted in these five key practices not being executed. CPSC attributed these changes as resulting from a change in administration, the effects of sequestration on the agency, and a lack of new projects.

We also found one new investment management activity that was not executed in our prior assessment that had been executed during the current audit period:

1. Ensuring resources have been identified and enabled to support the IRB including dedicated team members and contract support, as well as Integrated Project Teams (IPT) for key investments.

The following table summarizes our evaluation of the status of CPSC’s achievement of the five critical processes representing Stage 2 maturity:
As a result of these and other activities, we have concluded that CPSC has reached Stage 1 of the five-stage ITIM model as defined by the GAO. CPSC has implemented many of the key practices and critical processes that constitute Stage 2, but has not achieved full Stage 2 maturity.

Without adequate ITIM practices and procedures in place, CPSC may not be able to minimize risk and maximize investment return and thus it increases the chances that investments may not meet mission needs in the most cost-effective and efficient manner.

**Recommendations**

In order to ensure the remaining Stage 2 key practices and critical processes are executed timely and CPSC’s investment management capability is strengthened, we recommend the Chairman of the Consumer Product Safety Commission direct the Chief Information Officer to:

A. Return to the regularly scheduled IRB meetings, as specified in CPSC’s IRB charter.

B. Ensure the IRB meetings include the following items, among others:
   - Operation of IRB in accordance with assigned authority and responsibility;
   - Establishment of a tracking mechanism to ensure management controls are carried out;
   - Evaluation of alignment of IT investments CPSC strategic goals and objectives;
   - Review of performance of IT projects against expectations; and
   - Tracking of corrective actions for under-performing projects.

C. Consider the need for more frequent IRB meetings if IRB is not able to accomplish its mission and incorporate new activities timely.

We appreciate the cooperation and courtesies that CPSC personnel extended to us during this audit.

Sincerely,
Appendices
Appendix A

Background

The Consumer Product Safety Commission was created in 1972 as an Independent Federal Regulatory Agency, whose mission is to protect the public from unreasonable risks of serious injury or death from thousands of types of consumer products under the agency's jurisdiction. CPSC has jurisdiction over more than 15,000 kinds of consumer products. CPSC recalls products that present a significant risk to consumers either because the product may be defective or violates a mandatory standard issued by CPSC.

CPSC is headed by five Commissioners, one of which serves as Chairman of the Commission, who are assisted by an Executive Director and various other executive officials, including a Chief Information Officer (Director of Technology Services), and a Chief Financial Officer (Director of Financial Management, Planning, and Evaluation). CPSC, with approximately 500 employees, is headquartered in Bethesda, Maryland and has laboratories in Rockville, Maryland, as well as about 100 investigators, compliance officers, and consumer information specialists spread throughout the country.

The Consumer Product Safety Improvement Act of 2008 requires, that "the Inspector General of the Commission conduct reviews and audits to assess . . . the Commission's capital improvement efforts, including improvements and upgrades of the Commission's information technology architecture and systems and the development of the database of publicly available information on incidents involving injury or death."
Appendix B

Objectives, Scope, Methodology, and Criteria

Objectives

The objectives of our audit were to determine which of the five stages ITIM maturity most accurately describes CPSC’s ITIM framework, conduct a rigorous evaluation of the CPSC’s IT investment management process; report the results of our assessment that can be easily understood, and develop recommendations for CFSC for improving it process.

Scope

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provided a reasonable basis for our findings and conclusions based on our audit objectives. We conducted our fieldwork at the CPSC Headquarters in Bethesda, Maryland between September 2013 and April 2014.

Our performance audit was not designed to, and we did not, perform a financial audit of the amounts obligated or expended by CPSC.

This performance audit did not constitute an audit of financial statements in accordance with Government Auditing Standards. WS+B was not engaged to, and did not, render an opinion on CPSC’s internal controls over financial reporting or over financial management systems (for purposes of OMB’s Circular No. A-127, Financial Management Systems). WS+B cautions that projecting the results of our evaluation to future periods is subject to the risks that controls may become inadequate because of changes in conditions or because compliance with controls may deteriorate.

Methodology

To accomplish our audit objectives, we obtained an understanding of the Consumer Product Safety Improvement Act of 2008, which requires the Inspector General of CPSC to conduct reviews and audits to assess CPSC’s capital improvement efforts including the IT architecture and systems. We also reviewed GAO’s ITIM Framework for Assessing and Improving Process Maturity. We conducted interviews with CPSC officials from the Office of Information and Technology Services and performed a walkthrough of the relevant processes. Further, we reviewed CPSC investment management documentation, agency information, budgets, and other relevant documents. We judgmentally selected certain key processes for testing, and evaluated the audit evidence supporting the execution of the key process.

A performance audit includes gaining an understanding of internal controls considered significant to the audit objectives, testing controls, and testing compliance with significant laws, regulations, and other requirements. For this assignment, CPSC’s IT investment management controls were considered the specific internal controls to ensure the process works effectively. We evaluated those controls accordingly to determine how well they contribute to carrying out the IT investment management process model.
Objectives, Scope, Methodology, and Criteria

Criteria

We used the following criteria to accomplish our audit:

- Consumer Product Safety Improvement Act of 2008
- GAO's Information Technology Investment Management (ITIM): A Framework for Assessing and Improving Process Maturity (GAO-04-394G)
- Office of Management and Budget (OMB) Circular A-11
- OMB Circular A-130 Revised, "Management of Federal Information Resources".
- OMB Circular A-123, "Management Accountability and Control"
## Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIO</td>
<td>Chief Information Officer</td>
</tr>
<tr>
<td>CP</td>
<td>Critical Process</td>
</tr>
<tr>
<td>CPSC</td>
<td>Consumer Product Safety Commission</td>
</tr>
<tr>
<td>GAO</td>
<td>Government Accountability Office</td>
</tr>
<tr>
<td>IPT</td>
<td>Integrated Project Team</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>ITIM</td>
<td>Information Technology Investment Management</td>
</tr>
<tr>
<td>IRB</td>
<td>Investment Review Board</td>
</tr>
<tr>
<td>OIG</td>
<td>Office of Inspector General</td>
</tr>
<tr>
<td>OMB</td>
<td>Office of Management and Budget</td>
</tr>
</tbody>
</table>
CPSC has reviewed the *Performance Audit of Information Technology Investment Management* dated April 30, 2014 submitted by Withum, Smith & Brown. In the assessment, it was noted that CPSC completed Stage 1 and had implemented 33 out of 38 (87%) of the Stage 2 key practices. CPSC will continue the current level of performance while working to improve on the remaining 5 Stage 2 key practices. In particular, CPSC will work at addressing the recommendations detailed in the report. The actions that will be taken include:

- Resuming regularly scheduled IRB meetings;
- Operating CPSC’s IRB meetings under the authority and guidelines as outlined in the IRB Charter and ITIM Directive;
- Recording all action items and reporting out the progress in subsequent meetings until resolved;
- Adding a new field to the Project Intake Request form for the Strategic Goal and Objective and this field will be tracked in the PMO Dashboard; the IRB members will use this information when evaluating project requests;
- Continuing to have an item to address the status of current projects on the IRB agenda that will include the performance of that project; and
- Convening additional IRB meetings, as needed, to address any issues not covered in the regularly scheduled meetings or for items that need to be addressed in a timeframe that is earlier than the next scheduled meeting.