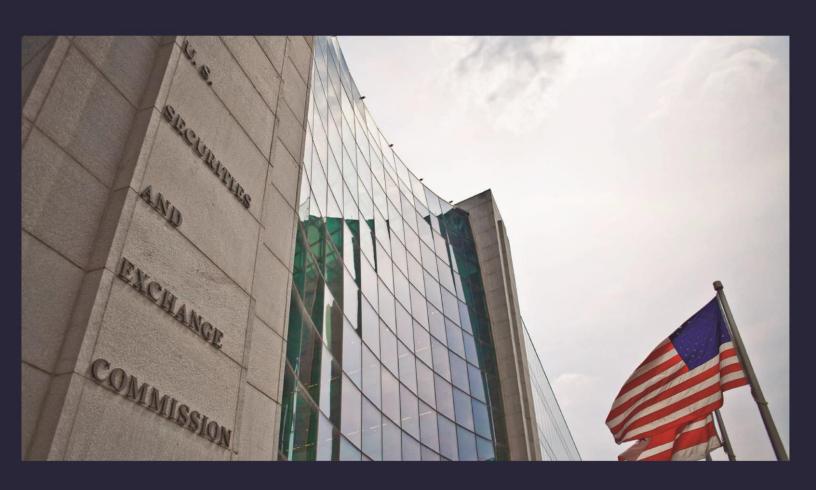


# U.S. Securities and Exchange Commission

# Office of Inspector General

Office of Audits

# Audit of the SEC's Management of Its Data Centers



September 29, 2017 Report No. 543

### REDACTED FOR PUBLIC RELEASE



# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

### MEMORANDUM

September 29, 2017

**TO:** Kenneth Johnson, Acting Chief Operating Officer

FROM: Carl W. Hoecker, Inspector General

**SUBJECT:** Audit of the SEC's Management of Its Data Centers, Report No. 543

Attached is the Office of Inspector General (OIG) final report detailing the results of our audit of the U.S. Securities and Exchange Commission's (SEC or agency) management of its data centers. The report contains ten recommendations that should help the agency develop a plan for future data center relocations and improve the SEC's data center contract management.

On September 13, 2017, we provided management with a draft of our report for review and comment. In its September 25, 2017, response, management concurred with our recommendations. We have included management's response as Appendix IV in the final report.

Within the next 45 days, please provide the OIG with a written corrective action plan that addresses the recommendations. The corrective action plan should include information such as the responsible official/point of contact, timeframe for completing required actions, and milestones identifying how the SEC will address the recommendations.

We appreciate the courtesies and cooperation extended to us during the audit. If you have questions, please contact me or Rebecca L. Sharek, Deputy Inspector General for Audits, Evaluations, and Special Projects.

#### Attachment

cc: Jay Clayton, Chairman

Lucas Moskowitz, Chief of Staff, Office of Chairman Clayton

Sean Memon, Deputy Chief of Staff, Office of Chairman Clayton

Peter Uhlmann, Managing Executive, Office of Chairman Clayton

Michael S. Piwowar, Commissioner

Richard Grant, Counsel, Office of Commissioner Piwowar

Kara M. Stein, Commissioner

Robert Peak, Advisor to the Commissioner, Office of Commissioner Stein

Robert B. Stebbins, General Counsel

Rick A. Fleming, Investor Advocate

John J. Nester, Director, Office of Public Affairs

Bryan Wood, Director, Office of Legislative and Intergovernmental Affairs

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Mr. Johnson September 29, 2017 Page 2

Vance Cathell, Director, Office of Acquisitions
Pamela C. Dyson, Director/Chief Information Officer, Office of Information Technology
Darlene L. Pryor, Management and Program Analyst, Office of the Chief Operating
Officer

# **Executive Summary**

Audit of the SEC's Management of Its Data Centers
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### Why We Did This Audit

The U.S. Securities and Exchange Commission's (SEC or agency) data centers house critical telecommunications, data, and computing resources, including the agency's

EDGAR—the Electronic Data Gathering, Analysis, and Retrieval system—which supports the financial reporting of public companies in the United States. Between 2012 and 2013, the SEC completed actions to relocate its data centers to their present locations. The agency awarded new data center contracts to (b)(7)(E) (hereinafter D1) and (b)(7)(E) (hereinafter D2) to provide data center services. The SEC's contracts with D1 and D2 total about \$16 million and \$18 million, respectively, if all contract options are exercised. We conducted this audit to assess the SEC's management of its data centers, ensure the data centers have adequate physical and environmental controls, and determine whether SEC personnel properly monitored the contractors' performance.

#### What We Recommended

We made ten recommendations for corrective action, including that the SEC conduct comprehensive reviews of the 2012-2013 data center relocations to identify lessons learned. We have previously reported that agency staff did not always perform contract management duties consistently and as required. Therefore, in addition to our recommendations regarding data center-related contract management, we strongly encourage the Director of the Office of Acquisitions to conduct a comprehensive review of the SEC's COR program and ensure controls are developed or strengthened to improve the SEC's contract management activities. Management concurred with the recommendations, which will be closed upon completion and verification of corrective action. Because this report contains sensitive information about the SEC's information security program, we are not releasing it publicly at this time.

#### What We Found

In 2008, the SEC paid \$162,000 for a contractor-developed plan to relocate the agency's data centers. However, the SEC did not follow the plan's recommended steps or timeline to ensure the 2012-2013 data center relocations were properly executed and that the SEC's data center providers, D1 and D2, could meet the agency's needs before awarding contracts and migrating data, thereby exposing SEC data to vulnerabilities. We were unable to determine why the SEC did not follow the recommended data center relocation steps or timeline because the current officials responsible for the SEC's data centers were not aware of the relocation plan, many key officials responsible for the data center relocations no longer work at the SEC, and, as discussed further below, contract files were incomplete. However, because the agency derived little, if any, benefit from the 2008 data center relocation plan, we believe the \$162,000 paid for the plan represents funds that the SEC may have wasted. Furthermore, we determined that SEC data and equipment at the D1 data center have been exposed to certain physical and environmental control vulnerabilities since the inception of the contract. These vulnerabilities have disrupted SEC operations and resulted in increased costs to the agency. Specifically, we estimate that since 2014 the SEC spent about \$370,000 in questioned costs to mitigate the physical and environmental vulnerabilities at the D1 data center. Finally, based on our observations, we question whether the D1 data center meets a key contract requirement—to be a Tier III data center or greater—as defined in Telecommunications Industry Association standards.

Additionally, we determined that the SEC did not adequately manage or monitor its data center contracts. We found that Contracting Officer's Representatives (CORs) did not always validate invoices or maintain complete files. COR contract files were missing required deliverables, justifications and support for critical decisions related to the data centers, and monthly reports. Further, D1's monthly power consumption reports were unusable and the SEC did not timely or adequately address known vulnerabilities at the D1 data center, or effectively assess physical and environmental controls at either data center. For example, the agency's 2016 and 2017 data center assessments identified no findings at either location, despite (D(F)(E)

vulnerabilities at the D1 data center and a report from a contractor we hired that identified 14 physical and environmental control deficiencies at the D2 data center.

Because of inadequate contract management, the SEC paid D2 invoices containing formula errors resulting in \$217,159 in overpayments (which has been refunded). We also identified about \$2.8 million in unsupported costs paid to D1. If the SEC does not take corrective action to validate certain costs and if all contract options are exercised, the agency will incur additional costs of about \$2.7 million in funds that could put to better use over the remaining life of D1's contract.

For additional information, contact the Office of Inspector General at (202) 551-6061 or https://www.sec.gov/oig.

### **Major Contributors to the Report**

Carrie Fleming, Audit Manager

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Matthew Fryer, Auditor

Leann Harrier, Assistant Counsel

## To Report Fraud, Waste, or Abuse, Please Contact:

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Address: U.S. Securities and Exchange Commission

Office of Inspector General

100 F Street, N.E.

Washington, DC 20549

## **Comments and Suggestions**

If you wish to comment on the quality or usefulness of this report or suggest ideas for future audits, evaluations, or reviews, please send an e-mail to OIG Audit Planning at <a href="mailto:AUDplanning@sec.gov">AUDplanning@sec.gov</a>. Comments and requests can also be mailed to the attention of the Deputy Inspector General for Audits, Evaluations, and Special Projects at the address listed above.