# MEMO

**Date**   April 22, 2020

**To**   Dr. Carla Hayden
Librarian of Congress

**From**   Kurt W. Hyde
Inspector General

**Subject**   Final Memorandum– *Overseas Field Office Replacement System (OFORS), Report No. 2018-PA-101b,* Public Release

We noted in our November 2019 report that we identified OFORS system development issues that extended beyond the scope of our Rio de Janeiro field office audit.[1] These issues covered a broad period of time; involved Library Services and other parties, including the Office of the Chief Information Officer (OCIO) and the Financial Services Directorate (FSD); and related to Library management's response to our OFORS recommendations made in a February 2017 report. In the OFORS finding in the November 2019 report, OIG committed to addressing OFORS-related issues in a separate memorandum. As described in LCR 1-140 *Inspector General*, the work prepared for this memorandum represents a review and not an additional audit. The objective of our review was to consolidate our follow-up activities on this matter. The outcome of this review does not impact the findings in the November 2019 report.

Based on management's written response to the draft memorandum, we consider all of the recommendations resolved. Your responses provided an action plan for the implementation of each recommendation, in accordance with LCR 9-160, *Rights and Responsibilities of Employees to the Inspector General*, §6.A. This memorandum will be made publicly available.

We appreciate the cooperation and courtesies extended by Library Services and the Office of the Chief Information Officer in completing this review.

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[1] *Audit of Overseas Field Offices – Rio de Janeiro, Brazil*, 2018-PA-101, November 2019.

**cc**     Principal Deputy Librarian of Congress
Deputy Librarian for Library Collections and Services
Director, Acquisition and Bibliographic Access
Chief Information Officer
Chief Operating Officer
General Counsel

**Library Services Needs to Strengthen Its Program/Project Management of IT Systems and Follow Through on its OFORS Project Management Responsibilities**

In September 2010, Library Services awarded a $1.7 million contract to develop OFORS, a custom-built, client-server application meant to improve activities associated with acquiring collection materials at the Library's six overseas field offices. OFORS was originally scheduled for completion by September 2012. However, it was not partially installed until fiscal year 2015, and the Library did not make final payment to cover the costs of certain outstanding OFORS components until July 2019.

In February 2017, we reported that the methodology used to develop OFORS was not sound from a system development lifecycle perspective and made seven recommendations to improve future development of OFORS.[2] We stated that Library Services' Overseas Operation Division (OvOp) had embarked upon the development of OFORS without specific and detailed policies, procedures, guidelines, and responsibilities related to program and project management. This lack of process guidance and accountability identified an existing gap in the Library's governance policies. OvOp also did not develop in detail the roles and responsibilities of project management. OvOp's project management practices exhibited several gaps from best practices, including not establishing accountability for specific project management activities, failure to perform and document oversight on a recurring basis, inconsistently documenting the matching of system requirements to development activities, a lack of project plan milestones, and missing analysis of additional funding requests. This lack of specific oversight activity precluded project management from identifying missing system functionality and cost overruns early in the development cycle.

With regard specifically to policies and procedures, we noted that Library Services had not developed policies and procedures that established stakeholder accountability and defined program and cost management activities in the following areas:

- Development and tracking of a Project Management Plan
- Project budget approval processes
- Regularly scheduled project budget reporting
- Cost variance analysis
- Accountability for project contractor oversight
- Tracking of corrective actions

To address these issues, and the other OFORS-related issues we identified in the report, OIG recommended that for all future development activities, "Library Services should ensure that current LOC policies and relevant industry best practices are adopted by service unit oversight and project management teams." OIG made six other recommendations. Library management provided updates on the recommendations in response to our requests for such updates as part of OIG completing our Semiannual Reports to Congress. We closed the recommendations when issuing our September 2017 semiannual report based on Library management informing us that the Library had fulfilled them.

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[2] *FY 16 Review of Systems Development Life Cycle*, 2016-IT-102, February 2017.

We rely on the assertions made by Library management in relation to our recommendations; we periodically perform follow-up audits, inspections and evaluations, or other reviews to verify implementation.  In this case, in conducting our audit of Library Services' overseas office in Rio de Janeiro, Brazil, we identified that Library Services had not fully addressed our recommendation to strengthen its oversight of OFORS and we believe this has implications for Library Services' oversight of the development of other information technology (IT) systems going forward.

We discovered that development problems had persisted; none of the overseas offices had an operational shipping or binding module in OFORS as of August 2019.[3]  The Rio de Janeiro field office dealt with this by developing spreadsheets to calculate cost projections and track budgeted to actual shipping costs for shipments to Cooperative Acquisitions Program members, a time-intensive and potentially error prone process.

We also learned in an interview with Library Services management that OvOp and Library Services had not implemented policies or practices to strengthen their oversight of OFORS' development other than deferring to OCIO's Project Management Office for guidance on the remaining development activities.  This is despite our report identifying numerous breakdowns in OvOp's oversight of the OFORS' development process and our recommendation that Library Services improve its "service unit oversight."

As a result, based on our discussions with Library Services, Library Services still needs to develop the capacity to serve as an active participant in the development and implementation of IT systems.  Although Library Services should continue working closely with OCIO as the Library executes the Project Management Life Cycle (PMLC), as defined in Library of Congress Directive (LCD) 5-310.1, and the Systems Development Life Cycle (SDLC) as defined in LCD 5-310.2, we believe the Library should further clarify policies and procedures that clearly establish service unit stakeholder accountability and define program/project and cost management responsibilities for the development and implementation of IT systems.  OIG has stated that for the development of an IT program/project to succeed at the Library, collaboration is necessary among OCIO, FSD, and the business unit that will own the system.  However, ultimately, the business unit plays the most fundamental part, and this is the case for Library Services for any of its future IT system development activities.  OIG made this point in a July 2019 memorandum to the Library's Executive Committee:

> Essentially, implementing an initiative from a strategic or directional plan often crosses unit boundaries, and involves critical components that comprise a "three legged stool"— at the Library they would be: [FSD], the business unit, and OCIO.  Activities from each should be integrated into [a] master schedule, and then the [program execution] critical path[4] within the plan is determined.

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[3] The field office in Brazil does not bind books, so a lack of a binding module did not negatively affect them.
[4] A critical path sets forth a program's/project's critical activities that, if delayed individually, will delay the completion of the program/project and negatively affect its outcome.

The business unit plays the most fundamental part in ensuring that the critical path is developed and followed—it leads the effort and has ultimate accountability. The effort requires all parties to engage in proactive communication, a constant pushing and pulling of information, and ensuring that all parties understand their role and are held accountable.[5]

We have raised this issue in relation to the U.S. Copyright Office's modernization program and our concerns about the Library's need to generally develop better programmatic implementation skills that comport with best practices, which contribute to the modernization program's implementation risks. The modernization effort is a Copyright-wide initiative to (1) build a new enterprise copyright system featuring a user-centered and flexible design, (2) streamline processes and policies, (3) improve access, and (4) re-imagine the entire U.S. Copyright Office. Making effective use of project management tools, such as scheduling and cost accounting methodologies, is essential to monitoring progress and ensuring accountability for the modernization program. For these reasons and others, we have identified the modernization program as a new Top Management Challenge for the Library in our *September 2019 Semiannual Report to Congress*.

When overseeing the development of IT systems, Library Services needs to be prepared to understand and follow project management methodologies, such as the Project Management Institute's *A Guide to the Project Management Body of Knowledge* (PMBOK); the Government Accountability Office's (GAO's) *Schedule Assessment Guide* and *Cost Estimating and Assessment Guide;* as well as GAO's upcoming guide for assessing Agile development programs.[6] Implementing effective cost accounting methodologies should not be overlooked. Based on communications with FSD, we determined that software capitalization of OFORS was underreported in Momentum by approximately $400,000 in direct contract costs. In addition, internal labor costs for the period September 2014 through July 2019, when efforts were underway to make the shipping or binding module operable, were expensed and not tracked by FSD. Had those internal labor costs been tracked, those costs combined with approximately $400,000 in direct costs may have put the total cost of the remaining components of OFORS over the $750,000 threshold for capitalizing software. As of November 15, 2019, the net book value of OFORS was $0 since the total capitalized amount of $1,276,917 was fully depreciated over five years starting in September 2014.

Library Services' project management responsibilities for OFORS have not been concluded. The 2017 report stated that stakeholder requirements were well-defined in gap analysis documentation. However, as outlined above, the decomposition of these into detailed product development requirements was not apparent. Now that the system development phase has been completed, a new gap analysis should be performed. This would allow the Library to assess whether business requirements and baselined cost estimates are being met, and, if not, what steps should be taken to ensure they are met successfully. As part of this assessment, a cost-benefit

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[5] OIG memorandum to members of the Library of Congress Executive Committee, Critical Path Method for Program Planning Implementation, July 11, 2019.

[6] See GAO's *Schedule Assessment Guide, Best Practices for Project Schedules*, GAO-16-89G, December 2015 and GAO's *Cost Estimating and Assessment Guide*, GAO-09-3SP, March 2009. GAO's *Agile Assessment Guide* is expected to be published in 2020.

analysis should also be performed to determine the best corrective action based on costs and benefits. This analysis should consider costs related to not meeting OFORS stakeholder requirements, such as those we identified in our audit of the Library Services' overseas office in Rio de Janeiro, Brazil. OIG believes performing both the gap and cost-benefit analyses is especially important since the Library identified three major corrections that need to be resolved in a March 2019 memorandum to the OFORS vendor.[7]

**Recommendations:**

We recommend:

1) The Library, in coordination with the Office of the Chief Information Officer and Financial Services Directorate, develop and implement policies and procedures that clearly establish service unit stakeholder accountability and define program/project and cost management responsibilities for the development and implementation of IT systems based on relevant best practices.

2) Library Services perform a gap analysis to assess whether OFORS business requirements and baselined cost estimates are being met and, if not, what corrective action steps should be taken based on a cost-benefit analysis. If corrective action steps are needed, a comprehensive project plan should be developed to manage and eliminate identified gaps.

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[7] The March 12, 2019, memorandum was sent by the Library's Office of Contracts and Grants Management to the vendor. It detailed technical issues related to system access time lag, binding invoices, and monograph copy information. In an April 2, 2019, email from the OFORS vendor to the Library, the vendor stated that the Library has agreed to resolve the remaining issues without the vendor's assistance.

## Appendix: Management's Response

**LIBRARY**
**LIBRARY OF CONGRESS**

**Office of the Librarian**

## MEMORANDUM

**DATE**   April 17, 2020

**TO**   Kurt Hyde, Inspector General

**FROM**   J. Mark Sweeney, Principal Deputy Librarian of Congress

**SUBJECT**   Management Response to OIG report 2018-PA-101b, Overseas Field Office Replacement System (OFORS)

The Library of Congress (Library) has reviewed your report and generally agrees with the recommendations.

The Library has been working to address the broader issues raised by your office with respect to engaging officials Library-wide in program/project management planning and accountability. Service units have primary accountability for program management; however, under the Library's centralization decision, the Office of the Chief Information Officer has primary responsibility for IT projects and costing, even where such projects may be a component of much larger service unit programs. Since service unit programs and IT projects are inter-related, service units and the Financial Services Directorate will be fully engaged in the IT project planning processes. The Library continues to refine the project management documentation, such as project charters and costing information, to clarify the service unit, OCIO, and FSD roles in IT project execution.

The Library has executed overarching indefinite delivery indefinite quantity contracts for support with analysis of and planning for modernization initiatives (including cost estimation, budgeting, identification of skill gaps, deployment of acquisition and project teams with effective oversight), executive consultation and leadership training, and implementation processes. At the Executive Committee's direction, service units will identify individuals responsible for critical Library projects and will provide the appropriate level of program management training to facilitate planning. In addition, the Library is drafting guidance for service units to capture employee time spent on information technology projects, which will be implemented while the Library explores options for obtaining an automated labor management module.

The Library developed integrated master schedules for IT and U.S. Copyright Office modernization pursuant to Congressional direction and delivered those documents in March 2020.

Page 1 of 2

The attached chart provides more specific responses and target dates for resolution of the two recommendations identified in the report.

Attachment

cc:     Jane Sánchez, Deputy Librarian for Library Collections and Services
        Robin L. Dale, Associate Librarian for Library Services
        Beacher Wiggins, Director, Acquisitions and Bibliographic Access
        Bernard A. Barton, Jr., Chief Information Officer
        Mary Klutts, Chief Financial Officer
        Edward Jablonski, Chief Operating Officer
        Elizabeth Pugh, General Counsel

**Management Comments on Draft OIG Report No. 2018-PA-101b**
**Overseas Field Office Replacement System (OFORS)**

| | Recommendation | Resp. Office | Comments | Target completion |
|---|---|---|---|---|
| 1 | The Library, in coordination with the Office of the Chief Information Officer and Financial Services Directorate, develop and implement policies and procedures that clearly establish service unit stakeholder accountability and define program/project and cost management responsibilities for the development and implementation of IT systems based on relevant best practices. | OCIO, FSD, HCD | The Library is selectively developing critical path documentation for major Library initiatives, but does not intend to adopt full program management and cost accounting for all Library programs at this time. Service units have primary accountability for program management; however, under centralization, OCIO has primary responsibility for IT projects and costing. The Library will explore a possible update of existing policies (e.g., LCD 5-310.1) and guidance to clarify the roles of service units and FSD in the IT project management process.<br><br>The OCIO is working closely with FSD and HCD to implement the WebTA Labor Module. WebTA would serve as the authoritative source for labor time accounting. The Library has begun the procurement process for the module to include services to implement the module.<br><br>Since service unit programs and IT projects are inter-related, service units and FSD will be fully engaged in the IT project planning processes. Once the WebTA Labor Module is implemented, OCIO, FSD, and OGC have agreed to expand tracking project actuals for Library staff time beyond OCIO to the entire Library. FSD is drafting a memorandum outlining the requirement for tracking IT Project actuals across the Library. OCIO is updating LCD 5-310.1 (Project Management Life Cycle) to reflect the collecting project actuals requirement outlined in the FSD memorandum. | Q1 FY2022 |
| 2 | Library Services perform a gap analysis to assess whether OFORS business requirements and baselined cost estimates are being met and, if not, what corrective action steps should be taken based on a cost-benefit analysis. If corrective action steps are needed, a comprehensive project plan should be developed to manage and eliminate identified gaps. | LS | Library Services has assigned a staff person to begin work on the business requirements gap analysis, comparing current OFORS Business requirements to those delivered by the current system. Library Services will submit a business proposal to OCIO to request assistance with the baselined cost analysis and the development of a comprehensive project plan to address any identified gaps. | Q2 FY2022 (business proposal submission FY21 with baselined cost analysis Q4FY2021) |