

Management Assistance Report: Modernizing Processes To Maintain Overseas Buildings Operations Commissioning Documentation Is Needed, AUD-MERO-19-31, June 2019

Summary of Review

During an audit of the commissioning of the Staff Diplomatic Apartment-2 (SDA-2) and Staff Diplomatic Apartment-3 (SDA-3) at Embassy Kabul, Afghanistan, which is currently underway, the Office of Inspector General (OIG) identified weaknesses in the manner in which the Bureau of Overseas Buildings Operations (OBO) maintains commissioning documentation. Commissioning documentation serves as the historical record of key decisions throughout the project planning and delivery process. In preparation for the audit of SDA-2 and SDA-3 at Embassy Kabul, OIG also reviewed commissioning documentation at Embassies Islamabad, Pakistan, and The Hague, the Netherlands, and noted similar weaknesses. Given the similar conditions found at all three locations, OIG believes that remedying the weaknesses identified in this report will benefit OBO construction projects worldwide.

OIG found two distinct weaknesses in OBO's practices for maintaining commissioning documentation. First, commissioning agents typically complete commissioning tests in hard-copy format. Specifically, commissioning test templates are prepared electronically, printed, and then the hard-copy print-out is taken to the construction site and completed. According to OBO officials, completing commissioning tests, which includes important performance tests on major facility components and systems, has traditionally been done in hard-copy format by the commissioning agent because no approved platform to create and transfer testing results electronically currently exists. Furthermore, OIG found that commissioning tests and related documentation are scanned and uploaded to ProjNet only at the conclusion of the construction project. ProjNet is the database used by OBO that is intended to share information among OBO officials, project team members, construction contractors, designers, and other consultants authorized to work on a construction project. According to the commissioning agent's contract, uploading commissioning documentation to ProjNet is not required until the construction project is complete. OBO construction management officials told OIG that doing so earlier would detract from conducting commissioning activities. However, completing and storing commissioning tests in a hard-copy format and uploading the commissioning tests and related documentation at the end of the construction project is problematic for several reasons: 1) organizing commissioning tests in hard-copy format and then scanning and uploading the information to ProjNet is inefficient; 2) the risk of important commissioning tests and related documentation being inadvertently lost or not uploaded increases because commissioning activities often take several years to complete and involve thousands of pages; and 3) the practice of uploading commissioning documentation to ProjNet at the conclusion of the construction project does not advance the goal of using ProjNet, which is to share information among construction project team members during the construction project. OIG concludes that OBO, as well as the commissioning agents involved, would benefit from eliminating the practice of using a hard-copy format to complete commissioning tests and employing a platform that would generate electronic commissioning documents and save them to an online repository.

Second, OBO's Construction Management Guidebook designates OBOLink as the repository to retain records for completed construction projects, including the final commissioning report, email, cables, and functional performance tests of components and systems. However, OBO is not using OBOLink to deposit construction project documentation because the platform cannot accommodate voluminous construction project files. This has been a long-standing problem. As a result, compact disks (CDs) are used to serve as the repository for commissioning documentation. However, using CDs as a final repository for commissioning documentation has disadvantages: 1) the life of CDs is limited, making them not ideal to serve as the medium for a repository of record and 2) OBO has not established a central repository or chain of custody for CDs received from the commissioning agent for each project. Instead, the CDs are typically retained by the associated Project Director. Even aside from the relatively short life span of the CDs, current processes create the risk that, if the associated Project Director leaves the Department, the CD could be inadvertently lost or destroyed.

OIG made six recommendations in this report that are intended to modernize OBO's processes to maintain commissioning documentation. On the basis of OBO's response to a draft of this report, OIG considers one recommendation closed and five resolved, pending further action. A synopsis of OBO's comments regarding the recommendations offered and OIG's reply follow each recommendation in the Results section of this report. OBO's response to a draft of this report is reprinted in its entirety in Appendix A.