This bill requires the Department of Information Technology (DoIT), by July 1, 2022, to issue a request for proposals or make a determination to participate in an intergovernmental cooperative purchasing agreement with another state for the implementation and ongoing maintenance of cloud-based virtual desktop infrastructure used by each unit of State government as desktop support and management systems. The bill establishes related requirements and factors that DoIT must consider when evaluating a proposal and making a determination.

Fiscal Summary

**State Effect**: Reimbursable expenditures by DoIT increase significantly, likely by millions of dollars annually, beginning in FY 2023 to implement cloud-based virtual desktop infrastructure for State agencies, as discussed below. State expenditures (all funds) increase as State agencies pay DoIT for the virtual desktop services; reimbursable revenues for DoIT increase correspondingly. Expenditures associated with the bill’s requirements may be offset, at least partly, as discussed below.

**Local Effect**: The bill does not directly affect local government operations or finances.

**Small Business Effect**: None.

Analysis

**Bill Summary**: DoIT may contract for virtual desktop infrastructure services consistent with laws governing procurement by Executive Branch agencies. DoIT must review
information technology (IT) contracts for desktop support and management systems entered into by other states and consider participating in an intergovernmental cooperative purchasing agreement with another state for the implementation and ongoing maintenance of cloud-based virtual desktop infrastructure.

In evaluating a proposal or making a determination, DoIT must take into consideration (1) price; (2) the quality of the cloud-based virtual desktop infrastructure services; (3) the technical ability and experience of the offeror; and (4) the guaranteed savings to the State of using cloud-based virtual desktop infrastructure services compared to the use of any preceding desktop support and management systems.

Current Law:

Department of Information Technology

DoIT manages and oversees the purchase, lease, and rental of IT by Executive Branch agencies. Agencies must develop their own IT policies, standards, and plans that must be consistent with the State’s IT master plan developed by DoIT. DoIT and the Secretary of Information Technology are also responsible for:

- developing and enforcing IT policies, procedures, and standards;
- providing technical assistance, advice, and recommendations to any unit of State government;
- reviewing agency project plans to make information and services available to the public over the Internet;
- developing and maintaining a statewide IT master plan, as specified; and
- adopting and enforcing nonvisual access standards to be used in the procurement of IT services, as specified

While DoIT oversees most Executive Branch agencies, some agencies, such the Maryland Stadium Authority, the University System of Maryland, and the Maryland Port Authority, are exempt from DoIT’s oversight. The Legislative and Judicial branches are not subject to DoIT oversight.

Major Information Technology Development Project Fund

In order to centralize State oversight and funding for major Executive Branch IT projects, Chapters 467 and 468 of 2002 established a review and approval process for major IT development projects and the related Maryland Information Technology Development Fund (MITDPF). The process and fund are both managed by DoIT. MITDPF is used to pay for major IT development projects in general funded agencies. Among other sources
of revenue, the fund consists of money received from IT agreements involving resource sharing, but certain government entities (including the Maryland Public Broadcasting Commission, as well as the Legislative and Judicial branches) are exempt from paying any money into the fund. Special funded agencies manage funding for their major IT projects, although their projects remain subject to the review, approval, and oversight of DoIT.

For a project to be eligible for funding through MITDPF, it must (1) be estimated to cost at least $1.0 million; (2) support critical business functions associated with the public health, education, safety, or financial well-being of the citizens of Maryland; or (3) be determined to require special attention and consideration by the Secretary.

**State Fiscal Effect:** DoIT advises that it has been evaluating cloud-based virtual desktop infrastructure as an option for the State since the beginning of the COVID-19 pandemic, which dramatically increased the demand for remote work options. The move to remote work in response to the pandemic has created a number of cybersecurity issues for DoIT and State agencies, the most serious being a lack of consistent remote access solutions. In response to this need, DoIT worked with the Maryland Emergency Management Agency to modify a cybersecurity grant to allow it to research and evaluate various remote access solutions, including the virtual desktop access solution required by the bill.

DoIT anticipates that the research project’s outcome, in combination with a pilot program funded through MITDPF (estimated to cost $1.0 million), will yield an implementable solution that meets the requirements of most agencies while simultaneously reducing cybersecurity risk. A preliminary analysis prepared by DoIT estimates the cost of full implementation of a cloud-based virtual desktop infrastructure to be approximately $3.0 million annually for every 12,000 users. As there are approximately 60,000 employees in Executive Branch agencies, not including higher education, the total cost to implement the infrastructure could be as much as $15.0 million annually.

DoIT operates largely on a fee-for-service basis, meaning that it charges State agencies for the services it provides to them. Thus, as cloud-based virtual desktop infrastructure is implemented throughout the State, reimbursable revenues and expenditures for DoIT increase corresponding to DoIT’s costs as State agencies pay for the virtual desktop services. Expenditures by agencies (all funds) also increase to compensate DoIT for those services. Depending on the service delivery model selected by DoIT for virtual desktop services, some of the costs associated with its implementation may be offset. Any such savings are not reflected in this analysis because they are contingent on DoIT’s assessment of the optimal service delivery model, which is not addressed by the bill.
Additional Information

Prior Introductions: None.

Designated Cross File: HB 1361 (Delegate P. Young) - Rules and Executive Nominations.

Information Source(s): Department of Information Technology; Department of Legislative Services

Fiscal Note History: First Reader - March 3, 2021

rh/mcr

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