

Management of the Système budgétaire automatisé Application

The Système budgétaire automatisé (SBA) is the primary budget application of the Ville de Montréal (the City). This application, which was developed internally in the early 1990s, contains all the City's budget data, both revenues and expenditures. The 2021 operating budget is \$6.17B.

Background

The Service des finances (SF) is responsible for daily and operational tasks. At the other end, the Service des technologies de l'information (STI) provides support for the application and is responsible for, among other things, programming and deploying changes, managing access requests and incidents, and preparing backup copies.

This application, which is hosted on the IBM mainframe computer, will need to be replaced in 2024 as part of the "Système budgétaire" project within the 2021–2030 Ten-year capital works program. In 2009, a study into implementing a new budget process was conducted, which proposed, among other things, to replace the SBA application with a solution integrated into the SIMON accounting system and new budget monitoring functionalities.

Purpose of the Audit

The purpose of this audit was to determine whether the control mechanisms put in place for the SBA application ensure that it does not present any major risk to the confidentiality, integrity and availability of the data.

Results

We concluded that, for certain control mechanisms listed below, improvements are needed to avoid loss of data integrity and availability of the application, which would cause major harm to the City's budget operations.

Roles and responsibilities are inadequately documented. In addition, the owner of the SBA application is not formally identified in any documentation.

Regarding access management, no specific procedure exists for the SBA application, the password parameters do not comply with the City's frameworks, and there is no logging or monitoring of access.

Change management is not framed within a formally documented, approved and distributed procedure.

The SF and the STI have no formal succession plan for existing human resources.

Incident management is not part of a formal procedure.

Main Findings

Roles and Responsibilities

- Roles and responsibilities and ownership of the SBA application are not formally identified, documented and known to all the stakeholders.

Access Management

- No formal procedure exists for managing access to the SBA application. The configuration of the passwords does not comply with the City's new standard. There is no logging or monitoring of access in the SBA application. On the other hand, the management of access profiles, the annual review and the management of generic and highly privileged accounts are adequate.

Change Management

- Change management is not part of a formal procedure. Requests for changes are not systematically documented. Those that are documented do not follow the production steps to implement a change (e.g., lack of analysis, approval of changes, tests and deployment).

Human Resources and Technical Sustainability

- No succession plan for human resources and knowledge transfer has been developed. The SBA application, which dates from the 1990s, is facing technological obsolescence.

Operations Management

- Documentation of the operations management of the SBA application, which is available to users and pilots, is adequate.
- Incident management is not subject to a formal procedure, and incidents are not systematically documented.
- Backup copies are made regularly and systematically. However, there is no procedure specific to the SBA application for the management of backup copies, and no periodic recovery tests are performed on the copies.

In addition to these results, we have made various recommendations to the business units, which are presented in the following pages. These business units were given the opportunity to agree to the recommendations.