

Chapter 26

Advanced Education—Managing Risks Related to its Critical IT System

1.0 MAIN POINTS

By October 2019, the Ministry of Advanced Education implemented the three outstanding recommendations related to managing risks associated with its unsupported critical IT system, the One Client Service Model (OCSM) system.

Since February 2018, when the Ministry and the Ministry of Central Services signed an amended agreement, Advanced Education received sufficient information to enable it to manage risks associated with the OCSM system.

Additionally, the agreement clarifies responsibility for upgrading and patching IT infrastructure, and the Ministry implemented a plan for these IT infrastructure upgrades and patches.

2.0 INTRODUCTION

2.1 Background

The Ministry of Advanced Education is responsible for the post-secondary education system, including coordinating, developing, implementing, and promoting the Government of Saskatchewan's policies and programs related to post-secondary education. The Ministry uses its OCSM system to support delivery of programs. Key post-secondary services include student financial assistance, training programs, registration services, and employment-related counselling.

2.2 Focus of Follow-Up Audit

This chapter describes our second follow-up of management's actions on the recommendations we made in 2015.

Our *2015 Report – Volume 2*, Chapter 32, concluded that for the 12-month period from September 1, 2014 to August 31, 2015, the Ministry of Advanced Education had, other than the areas of our three recommendations, effective processes to manage the risks to service delivery from its unsupported IT system, the One Client Service Model system. By July 31, 2017, the Ministry partially implemented our three recommendations.¹

To conduct this audit engagement, we followed the standards for assurance engagements published in the *CPA Canada Handbook—Assurance* (CSAE 3001). To evaluate the Ministry's progress toward meeting our recommendations, we used the relevant criteria from the original audit. The Ministry's management agreed with the criteria in the original audit.

¹ We reported our previous follow-up on the Ministry's actions on recommendations in our *2017 Report – Volume 2*, Chapter 28.



To carry out our follow-up audit, we interviewed Ministry staff; reviewed agreements, committee minutes and reports received by the Ministry; and assessed the reasonableness of supporting documentation.

3.0 STATUS OF RECOMMENDATIONS

This section sets out each recommendation including the date on which the Standing Committee on Public Accounts agreed to the recommendation, the status of the recommendation at October 1, 2019, and the Ministry's actions up to that date.

3.1 Updated Agreement Clarifies Responsibilities for Reporting and Upgrading Infrastructure

We recommended that, to analyze risks and make decisions about its One Client Service Model system, the Ministry of Advanced Education periodically obtain information about its One Client Service Model system's:

- ***Indirect costs***
- ***Information technology infrastructure end-of-life or end-of-support dates***
- ***Estimated information technology infrastructure upgrade costs to maintain vendor support***

(2015 Report – Volume 2, p. 155, Recommendation 1; Public Accounts Committee agreement September 15, 2016)

Status—Implemented

We recommended the Ministry of Advanced Education develop and implement a plan, over the One Client Service Model system's expected remaining life, for upgrading and patching the information technology infrastructure on which the system resides. (2015 Report – Volume 2, p. 157, Recommendation 2; Public Accounts Committee agreement September 15, 2016)

Status—Implemented

We recommended the service level agreement between the Ministry of Advanced Education and the Ministry of Central Services clearly outline responsibility for upgrading and patching the information technology infrastructure on which the One Client Service Model system resides and the associated costs. (2015 Report – Volume 2, p. 157, Recommendation 3; Public Accounts Committee agreement September 15, 2016)

Status—Implemented

In February 2018, the Ministry of Advanced Education and the Ministry of Central Services (its IT service provider) signed an amended IT service agreement, which better enables Advanced Education to manage risks associated with OCSM.

The amended agreement clearly outlines:

- The information Central Services must give Advanced Education on indirect costs, end-of-life or end-of-support dates, and estimated IT infrastructure upgrade costs to maintain vendor support.

We found this information is sufficiently robust to enable the Ministry to monitor risks associated with OCSM. We also found the Ministry is receiving this information as expected.

- The responsibilities of Advanced Education, Central Services, and other OCSM partners for implementing and funding activities to upgrade and patch the OCSM system, including both the infrastructure supporting the system and application software.

We found Advanced Education, Central Services, and other OCSM partners developed an upgrade schedule. This schedule includes planned projects for upgrades to OCSM infrastructure and applications up to March 31, 2021. The Ministry obtains cost estimates for planned upgrades from Central Services as part of its annual budgeting process.

We also found the parties worked together to prioritize upgrades and patching through regular meetings. We found the Ministry monitored upgrades and patches ensuring it is done when expected.

Obtaining the necessary information (e.g., end-of-support dates, estimated upgrade costs) to analyze risks and make decisions about its OCSM system will help the Ministry and OCSM partners to assess risks to make effective decisions related to the OCSM system.

Maintaining a plan to upgrade and patch the OCSM system over its expected remaining life will reduce the risk of security breaches that could expose confidential information (e.g., student personal information) maintained in the OCSM system.

