

# Lottery Scratch & Win Ticket Destruction Review

Audit Services

February 14, 2020

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## Transmittal Letter

May 19, 2020

Kevin Sweeney  
Director, Corporate Security & Compliance  
74 W. Seymour Street  
Kamloops, BC V2C 1E2

Dear Kevin,

**Re: Lottery Ticket Scratch & Win Destruction Review**

Attached is the Audit Services' report on the Lottery Scratch and Win Ticket Destruction Review. The scope of this engagement includes the control design assessment of the destruction process for scratch & win lottery tickets.

Based on our review and observation of the actual ticket destruction held on February 14, 2020, we conclude that no exceptions were noted in the control design for the lottery scratch & win ticket destruction process. We observed one opportunity for improvement, which was brought to management's attention.

We thank the management and staff of the Lottery Order Processing and Corporate Security & Compliance for their cooperation and assistance during this review.

Sincerely,  
s 22

Gurmit Aujla CPA, CA, CIA, CRISC, CRMA  
Director, Internal Audit

cc: Craig James, Director Lottery Sales & Operations

## Introduction

Lottery scratch & win tickets are returned to BCLC by Retailers for destruction for the following reasons:

- Major prize has been won
- Tickets expiring soon
- Season or event has concluded
- Damaged tickets
- Expired tickets

s 15(1), s 17(1)

In FY2019, Audit Services conducted a control design review of the lottery ticket destruction process and tested the identified key controls for effectiveness. Since the last review, the vendor has changed. Under the new vendor, the ticket destruction process can now be conducted on-site at BCLC's warehouse. Audit Services reassessed the control design and effectiveness in accordance with our FY2020 audit plan. Audit Services observed the on-site ticket destruction process on February 14, 2020, and updated the process flowchart accordingly to factor in the option to destroy the tickets on-site.

## Statement of Objectives

The objectives of this engagement were to:

- To assess overall control design, specifically to:
  - Understand and document the Lottery Ticket Destruction process
  - Identify key risks and controls
  - Identify areas for improvements
- Provide reasonable assurance that key controls in place are effective
- Assess personnel changes and their impact on the business unit under review

## Statement of Scope

The scope of this engagement included the control design assessment of the Lottery Ticket Destruction process.

## Statement of Methodology

Our methodology and approach included:

- Observe/walkthrough an actual lottery ticket destruction
- Update the ticket destruction process flowchart as necessary
- Identify and report opportunities for improvements

## Statement of Audit Standards

We conducted our work in accordance with professional standards issued by the Institute of Internal Auditors. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity or function under audit. An audit also includes assessments of applicable internal controls and compliance with requirements of laws, rules and regulations when necessary to satisfy the audit objectives. We believe that our review provides a reasonable basis for our conclusions.

## Personnel Changes in Key Control Areas

BCLC's Audit Committee has requested that Audit Services include information about personnel changes to key control areas during all engagements related to BCLC's core functions. Personnel changes can impact the control environment, effectiveness of key controls, and loss of risk and control knowledge. During this engagement, we discussed personnel changes, retirements, and revisions to roles with management. Audit Services noted the role change of the Product Distribution Team Lead subsequent to the review. Audit Services noted that the addition of the Lottery Operations Manager to the warehouse floor mitigates the risk in the changing of key personnel to the Lottery Ticket Destruction process.

## Conclusions

Based on the work performed, we conclude that the control design for the lottery scratch & win ticket destruction process is adequate and no exceptions were noted. Audit Services updated the process flowchart for changes made to the process since the previous review. One opportunity for improvement was observed which has been shared with management.

## Acknowledgements

We wish to thank management and staff for their participation, assistance and cooperation during this review. Audit Services was given full access to all resources and information required to complete this review.

# Lottery System Encryption – ILC Standard 12.G Test of Control Effectiveness

Audit Services

February 18, 2020

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## Transmittal Letter

May 22, 2020

Craig James, Director, Lottery Sales and Operations  
2940 Virtual Way  
Vancouver, BC V5M 0A6

Dear Craig:

**Re: Lottery System Encryption – ILC Standard 12.G Test of Control Effectiveness**

Attached is the Audit Services' report on the test of control effectiveness of the encryption between retailers and BCLC's Head Office. This engagement is in addition to the annual ILC Control Standards audit. The next level of assurance, testing the effectiveness of these controls, is imperative to ensure these controls are operating as intended.

As part of our FY2019-FY2020 approved audit plan, we completed the test of controls effectiveness related to Lottery System Encryption, specifically the encryption levels on:

**s 15(1), s 17(1)**

Based on our audit, we noted that the overall encryption control is working as expected. Any improvement areas identified have been shared with management.

We thank management and staff of the Network and Cyber Security teams for their cooperation and assistance during this review.

Sincerely,

s 22

Gurmit Aujla CPA, CA, CICA, CRISC, CRMA  
Director, Internal Audit

cc: Brad Desmarais, Interim VP Security and Chief Compliance Officer  
Mark Lane, Senior Manager Cyber Security



## Introduction

Audit Services performs test of effectiveness on specific ILC Standard areas to provide assurance on BCLC's lottery control environment. This is in addition to the annual ILC Control Standards audit, a collection of tests of control design, to confirm controls exist and are in place. The next level of assurance, testing the effectiveness of these controls, is imperative to ensure these controls are operating as intended.

For FY2020, Audit Services completed the effectiveness test on ILC Standards 12G – Encryption.

## Statement of Objectives

The objective of this engagement was to assess the effectiveness of the lottery control environment for data in transit between retailers and BCLC's Head Office, with a specific focus on the encryption level used for communications within the lottery system. Sensitive BCLC and customer data travel from retailers to BCLC's Head Office and back, typically initiated by a retailer when a customer is purchasing a ticket. This includes information such as:

s 15(1), s 17(1)

## Statement of Scope

The scope of this engagement was limited to the following areas:

s 15(1), s 17(1)

The following diagram further explains the parameters of testing both Lottery Retailer Network environments from endpoint to endpoint.  
s 15(1), s 17(1)

## Statement of Methodology

Audit Services collaborated with BCLC's Network and Cyber Security teams on this project:

- BCLC's Network team provided the network access for the network packet capturing tools used to obtain encrypted lottery data to test.
- Using BCLC owned tools; BCLC's Cyber Security team and Audit Services tested the data encryption levels.
- Audit Services independently reviewed the results from the tests performed on the encrypted data.

## Statement of Audit Standards

We conducted our engagement in accordance with professional standards issued by the Institute of Internal Auditors. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity or function under audit. An audit also includes assessments of applicable internal controls and compliance with requirements of laws, rules and regulations when necessary to satisfy the audit objectives. We believe that our audit provides a reasonable basis for our conclusions.

## Conclusion

Based on our review, we noted that existing Encryption Controls on the lottery system from BCLC's Head Office to/from retailer locations are adequate. s 15(1), s 17(1)

This current lottery infrastructure and application will be retired in FY2021; the new lottery infrastructure and application will be tested prior to launch.

## Acknowledgements

We wish to thank management and staff for their participation, assistance and cooperation during this review. Audit Services was given full access to all resources and information required to complete this review.



74 West Seymour Street  
Kamloops, BC V2C 1E2

T 250 828 5500  
F 250 828 5631

2940 Virtual Way  
Vancouver, BC V5M 0A6

T 604 270 0649  
[www.bclc.com](http://www.bclc.com)

June 1, 2020

Rod Toula  
Interprovincial Lottery Corporation  
40 Holly Street – 6th Floor  
Toronto, ON M4S 3C3

Dear Mr. Toula:

Re: BCLC's Report on Compliance with ILC Control Standards

We have completed the audit of BCLC's compliance with the Interprovincial Lottery Corporation's ("ILC") Control Standards as required in the Regional Responsibilities (Section 1.2) of the ILC Policies and Procedures Manual.

Please find attached the completed Annual ILC Control Standards Audit report (referred to as Appendix 12 B).

The enclosed audit report is intended for the exclusive use of BCLC and ILC in assessing BCLC's compliance with the Control Standards as at March 31, 2020, and is not to be relied upon for any other purpose.

s 22

Gurmit Aujla, CPA, CA, CIA, CRISC, CRMA  
Director, Audit Services

cc: Greg Moore, Interim CEO and President, BCLC  
Kevin Gass, Vice President, Lottery Gaming, BCLC  
Pat Davis, Chief Information Officer, BCLC  
Alan Kerr, CFO and VP Finance & Corporate Services, BCLC

# Vulnerability Management

Audit Services

April 3, 2020

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## Transmittal Letter

June 8, 2020

Mark Flegel  
Manager, Evergreen Programs  
74 West Seymour Street  
Kamloops, BC V2C 1E2

Dear Mr. Flegel

**Re: Vulnerability Management – Legacy Systems**

Attached is the Audit Services' report on the above review.

Our findings herein include two findings that address one high risk and one moderate risk topic. Management has agreed with our recommendation and developed appropriate response plans to address items identified.

We thank the management and staff for their cooperation and assistance during this engagement.

Sincerely,  
s 22

Gurmit Aujla CPA, CA,<sup>1</sup> CIA, CRISC, CRMA  
Director, Internal Audit

cc: Pat Davis, Chief Information Officer  
Cameron Adams, Interim VP, Digital Enterprise Services  
Brad Desmarais, VP, Casino and Community Gaming and Interim VP Legal, Compliance, Security

## Introduction

ERMS' FY2020 – Q3 risk report identifies Legacy Applications and Infrastructure risk as one of the top corporate strategic risks with BCLC's Enterprise Risk Management Services. Legacy systems risk can impact revenue and operations caused by a lack of vendor support to BCLC's technology infrastructure and may become unreliable, vulnerable or are no longer supported.

### ERM Business Technology Risk Register (BT.E6 – Legacy Systems Risk):

*"BCLC's technology infrastructure, operating systems and applications may become unreliable, vulnerable or are no longer supported."*

As such, the work by Business Technology (BT) and Legal, Compliance, Security business units to build a comprehensive evergreen program is critical to the planned risk treatment. In particular, vulnerability management, and specifically addressing legacy systems risk, is a practice intended to prevent the exploitation of IT vulnerabilities.

Audit Services' approach assesses and identifies BCLC legacy systems classified as **Mission-Critical**<sup>1</sup> and **Mission-Vital**<sup>2</sup> in accordance to business continuity planning and operations (see Statement of Scope below). In future, we may include continuous monitoring for vulnerability management and may expand through the technology stack, including but not limited to applications, middleware, hardware.

## Statement of Objectives

The objective of this engagement is to focus on the vulnerability management of production systems that operate legacy versions of **s 15(1), s 17(1)** operating systems. Audit Services will identify these legacy systems, verify system owners, confirm business function and determine whether management have initiatives in place to mitigate legacy risk.

The primary objective of this activity is to:

- Identify legacy systems categorized by BCLC Business Continuity as *Mission-Critical* and *Mission-Vital*
- Identify risk mitigation activities on the above identified legacy systems

## Statement of Scope

The scope includes a review of the systems operating **s 15(1), s 17(1)** in the following domains during Q4 FY2020:

- Casino & Community Gaming servers
- eGaming (Playnow.com) servers
- Connex servers

**s 15(1), s 17(1)**

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<sup>1</sup> Mission-Critical – services to be restored within hours as defined by BCLC's Business Continuity Program

<sup>2</sup> Mission-Vital – services to be restored within a day as defined by BCLC's Business Continuity Program



## Statement of Methodology

Our methodology and approach included:

- Review policy and process documentation;
- Reviewed available system generated reporting from BT and Cybersecurity;
- Conduct interviews with system owners and key stakeholders;
- Identify and report opportunities for improvements.

## Statement of Standards

We conducted our engagements in accordance with professional standards issued by the Institute of Internal Auditors. Those standards require that we plan and perform the audit to afford a reasonable basis for our judgments and conclusions regarding the organization, program, activity or function under review. An audit also includes assessments of applicable internal controls and compliance with requirements of laws, rules and regulations when necessary to satisfy the audit objectives. We believe that our review provides a reasonable basis for our conclusions.

## Personnel Changes in Key Control Areas

BCLC's Audit Committee has requested that Audit Services include information about personnel changes to key control areas during all engagements related to BCLC's core functions. Personnel changes can impact the control environment, effectiveness of key controls, and loss of risk and control knowledge. It was noted that there no critical personnel changes in the Business Technology teams that administer this program.

## Conclusions

Based on the audit work performed, s 15(1), s 17(1)

## Acknowledgements

We wish to thank management and staff for their participation, assistance and cooperation during this review. Audit Services was given full access to all resources and information required to complete this review.

## Audit Findings

Following are the most significant issues that we identified during our work along with associated recommendations to address these issues. To assist management in prioritizing action plans in response to our recommendations, we have categorized each issue by level of risk, using the following scale:

- High – Issue should be addressed and resolved immediately.
- Moderate – Issue requires management attention and should be addressed and resolved within a reasonable time period.
- Low – Issue is of lesser significance that is administrative in nature. Any low risk findings have been discussed with management and therefore excluded from the report.

These rating levels are measured in the context of this audit and its objectives, rather than as related to overall corporate risk. Audit Services commits to conducting follow-up audits on all significant findings within 6 months from the date this audit report was issued.

s 15(1), s 17(1)

s 13(1), s 15(1), s 17(1)

### Management Response

Management agrees with the findings in the report and will work with the relevant product owners of the legacy systems detailed in this report to develop a plan to address the risks. Management will work with product owners on an implementation schedule and will advise Audit Services of the expected timelines by June 30, 2020.

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<sup>3</sup> Note: Critical and Severe vulnerabilities assessed as per industry-standard **Common Vulnerability Scoring System (CVSS)**