

# Texas Lottery Commission

## Comprehensive Study and Evaluation of Lottery Security

### PUBLIC REPORT

December 29, 2012



Delehanty Consulting LLC  
Security, Integrity, and Performance

## EXECUTIVE SUMMARY

The Texas State Lottery Act requires the Executive Director to employ an independent firm to conduct a comprehensive study of all aspects of lottery security at least once every two years. In April 2012, the Texas Lottery Commission (TLC) engaged Delehanty Consulting, LLC to perform the required security study. The study included each of the twelve aspects of lottery security identified in the State Lottery Act.

- Lottery personnel security
- Sales agent security
- Lottery operator and vendor security
- Security against ticket counterfeiting, alteration and other fraudulent winning
- Security of lottery drawings
- Lottery computer, data communications, databases and systems security
- Lottery premises and warehouse security
- Security of distribution of tickets
- Security of ticket validation and payment procedures
- Security involving unclaimed prizes
- Security aspects of each lottery game
- Security against deliberate placement of winning tickets in lottery games involving pre-printed tickets

Per the contractual requirement and security study best practices, Delehanty Consulting performed a rigorous risk assessment at the beginning of the engagement. The results of this risk assessment were incorporated into a revised scope of work that was approved by the Texas Lottery Commission Director of Internal Audit. The final scope of work included two specific investigations for suspicious activity that, if found, would indicate the existence of possible fraud.

The results of the work performed during this engagement indicate that overall security at the Texas Lottery Commission is very good. No issues were identified that have any known effect on the accuracy, fairness or integrity of past, current, or upcoming games. Delehanty Consulting noted five issues that represent medium risks; four of these issues are attributable to TLC contractors.

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# INTRODUCTION

Delehanty Consulting LLC (DCLLC) conducted a comprehensive study and evaluation of lottery security including computer security, systems security, and all aspects of lottery security for the Texas Lottery Commission (TLC) in accordance with the State Lottery Act, Texas Government Code Chapter 466, specifically §§ 466.020(e) – (f). A risk assessment was performed between April 30, 2012 and July 24, 2012. Field work began June 12, 2012 and was completed November 19, 2012. This engagement was performed in accordance with the Request for Proposals (RFP) for Lottery Security Study Services (RFP No. 362-11-1160) and CONTRACT FOR LOTTERY SECURITY STUDY SERVICES BETWEEN THE TEXAS LOTTERY COMMISSION AND DELEHANTY CONSULTING, LLC, executed April 20, 2012.

## Objectives

### Overall Objective of Engagement

The study and evaluation's overall objectives were to perform a comprehensive assessment of TLC's security controls, identify specific current and potential risks, and identify control enhancements for improving TLC's overall security. The assessment did not include a review of the sales or cashing activities performed by TLC retailers. Also, the assessment did not include a review of the Texas Lottery Commission Charitable Bingo Operations Division.

### Report Objectives

This report focuses on specific areas where DCLLC believes TLC could improve controls or could improve the implementation or adherence to those controls. It does not focus on the controls that are adequately meeting the control objectives.

## Methodology

To accomplish the engagement objectives DCLLC used the following approach:

- Reviewed various documents and information to gain an understanding of Texas Lottery Commission nuances for critical processes
- Conducted a risk assessment as further described below
- Interviewed key TLC and contractor personnel
- Verified the existence and effectiveness of the controls and processes in place to meet the TLC's security objectives
- Identified weaknesses and associated risks
- Provided a draft report to the Texas Lottery Commission.
- Texas Lottery Commission management provided responses to issues which were then incorporated into the report.
- Provided Final Confidential Report and this Final Public Report

## **Risk Assessment**

Upon contract award, the Delehanty team began a formal risk assessment. The purpose was to further refine the scope of work to reflect risks and issues unique to the Texas Lottery Commission at the time of our study and evaluation. Steps that were conducted in the risk assessment phase are described below.

### **1. Senior Stakeholder Interviews**

Critical senior stakeholders who play key roles in enterprise risk management were interviewed to determine specific concerns, risk mitigation efforts, and acceptable risk tolerance.

### **2. Organizational Scan**

An Organizational Scan was used to assess risks, determine priorities, and understand the existing Texas Lottery Commission culture as it relates to security. The scan included two employee surveys to elicit information that was used during the assessment. The results of the organizational scan indicated a strong security culture within the organization.

### **3. Lottery-Specific Process and Systems Orientation**

Consultants with specific expertise in each operational area familiarized themselves with Texas systems and processes. Risks unique to the Texas Lottery were identified.

### **4. Review Existing Reports**

Security-related evaluations and reports generated by other entities in the previous twenty-four months were reviewed.

### **5. Incident Review and Data Analysis**

Available TLC incident reports and data were analyzed. This included incidents regarding a number of issues such as out-of-balance situations, drawing incidents, lottery system issues, and security incidents. Various reports and databases maintained by GTECH, the lottery operator, were reviewed to identify specific risks related to online games occurring since the conversion to the new system in 2011.

### **6. Application of Existing Knowledge/Delehanty Experience**

We applied our knowledge of lottery processes and their associated risks.

### ***Risk Assessment Results***

Using the confidential results of the risk assessment, Delehanty Consulting recommended specific changes to the original scope of work. The final scope of work performed for this study and evaluation was approved by the Texas Lottery Commission's Director of Internal Audit.

The primary focus of the work effort was on high-risk areas based upon the input from the Texas Lottery Commission management team and upon our experience in the lottery industry.

## Summary of Findings

The results of the work performed during this engagement indicate that overall security at the Texas Lottery Commission is very good. No issues were identified that have any known effect on the accuracy, fairness or integrity of past, current, or upcoming games. The results of our organizational scan indicated a very strong security culture within the organization. Employees believe that management sets a strong tone on the importance of security and believe that security measures are consistently applied throughout the organization.

During the review we identified security concerns which have been aggregated into thirty issues. These issues will be communicated to TLC Management in a separate, confidential report. Each issue was assigned a *High, Medium, or Low* risk level based on the likelihood and consequences of an occurrence of the risk. See table below for a description of the risk levels. There were zero High, five Medium, and twenty-five Low risk issues. No issues were identified that have any known effect on the accuracy, fairness or integrity of past, current, or future games.

Description of Risk Levels	
Risk Level	Description
High Risk	<ul style="list-style-type: none"> <li>An issue that could immediately be exploited to conduct large-scale fraud, theft, or harm to the Lottery</li> <li>An overall ineffective control environment or lack of risk assessment</li> <li>Identification of previous major fraud, theft or inaccuracy in game play</li> </ul>
Medium Risk	<ul style="list-style-type: none"> <li>An issue that could immediately be exploited to conduct small-scale fraud or theft</li> <li>An issue that does not itself enable fraud or harm to the Lottery but allows a major step towards such fraud</li> <li>A deficiency preventing the Lottery from concluding that game play and data are within specifications</li> <li>Inadequate controls over non-routine or non-systemic adjustments to game or financial data</li> <li>A control or process whose failure could result in significant embarrassment to the Lottery or raise questions regarding the Lottery's security and integrity.</li> </ul>
Low Risk	<ul style="list-style-type: none"> <li>A control or process whose design or operation is not effective but other layers of controls are in place and believed to be effective to prevent theft or fraud.</li> <li>A control or process whose failure could result in some embarrassment to the Lottery</li> </ul>

Having performed sixteen comprehensive lottery security evaluations and having worked with more than half the lotteries in the U.S., Delehanty Consulting has significant experience in the Lottery industry. Within this context, we found that the Texas Lottery Commission distinguishes itself in a number of areas related to security controls and monitoring. TLC's documentation of procedures is exceptional. Additionally, TLC has exceptional practices designed to prevent instant ticket quality issues and to detect non-random drawings.

Delehanty Consulting, LLC  
December, 2012