



**State of Nevada Gaming Control Board**

**Audit and Control of Mobile Gaming  
Systems, System Based Games, and  
System Supported Games**

**October 30, 2007**

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## **Executive Summary**

### **Purpose**

This report is intended to summarize the operation, documentation requirements, the revenue reporting process and audit procedures relating to mobile gaming systems (MGS), system based games (SBG) and system supported games (SSG).

### **Background**

After months of discussion with gaming device manufacturers and casino operators, the Board adopted Technical Standards for system based games and system supported games on November 17, 2005. With system based games (also commonly referred to as “server based games”), the games reside on the server and wagering outcomes are determined at the server level. With system supported games (also commonly referred to as “downloadable games”), games offered for play at a slot machine can be changed through a computer network without having to access the machine itself. The wagering outcomes are determined at the machine level as with conventional slot machines.

As a result of the 2005 Nevada legislative session, the Nevada Gaming Commission was given the authority to adopt regulations governing the licensing and operation of mobile gaming. On March 23, 2006, regulation and technical standard amendments were adopted for mobile gaming systems. For a mobile gaming system, the player can wager on system based games within a casino using a wireless mobile device.

Since May 2006 the Gaming Control Board’s Audit and Technology Divisions, with the assistance of an Advisory Group consisting of licensed slot machine manufacturers, licensed operators of a mobile gaming system, casino operators including slot department, accounting and internal audit personnel and CPA firm personnel, have been discussing possible minimum internal control standards and technical standards related to these new technologies. The involvement of these participants was vital in establishing a reasonable framework in developing systems meeting the casino’s operational needs and the Gaming Control Board’s regulatory requirements.

A public meeting was held in August 2007 addressing proposed revisions to the technical standards and proposed minimum internal control standards associated with the operation of system based games, system supported games and mobile gaming systems.

### **Results**

With the contributions made by these various participants, a regulatory plan has been initially established for system based games, system supported games and mobile gaming systems. The conclusions are summarized in the following section entitled “Overview of Regulatory System for SBG, SSG, and MGS”. Details regarding how these systems will be audited and controlled are provided in Attachments A, B, and C. Proposed Technical Standard changes related to these technologies are provided in Attachment D, while Minimum Internal Control Standard changes are provided in Attachment E. On October 31, 2007, the Board released an industry letter indicating that the proposed changes denoted in Attachments D and E will be considered interim policy until such time as the requirements have been formally adopted. Manufacturers of these technologies, and casino users of these systems, should comply with this interim policy unless otherwise approved by the Board.

# Overview of Regulatory System for Mobile Gaming Systems, System Based Games and System Supported Games

## System Definitions

System Based Game (SBG) is a gaming device where the games are stored within the system and available for patron play through a client station. The game outcome is determined within the system. The technical definition is addressed at Regulation 14 Technical Standard 1.010(26).<sup>1</sup>

System Supported Game (SSG) is a gaming device where the games are stored and the game outcome is determined within the client station. New games are downloaded, and/or changes to games available for play are initiated, from the system to the client station. The technical definition is addressed at Regulation 14 Technical Standard 1.010(27).<sup>2</sup>

Mobile Gaming System (MGS) is an extension of SBG with the exception that the mobile communications device, used in place of a client station, functions within a wireless environment. The technical definition is addressed at Regulation 14.010(11).<sup>3</sup>

## Operation Overview

The descriptions and proposals as to how these systems will function are the Board's initial assumptions, and the Board recognizes that system configuration variations will probably exist. Due to the newness of these technologies, the Board prefers to initially allow what can be described as "base systems". As the Board and industry become more acclimated to these systems, further applications and system capabilities will most likely be allowed.

### Mobile Gaming System (MGS)

MGS is to be operated within one casino with no inter-casino linked play to be conducted.

The MGS may or may not be a self-contained system with a cashless wagering system ("CWS") and/or on-line slot metering system ("OSMS"). Self-contained systems are required to comply with existing Technical Standards and Minimum Internal Control Standards (MICS) related to CWS and OSMS (see Technical Standards 3.140, 3.150 and 3.160 in Attachment D) and with these proposed requirements.

The MGS may be interfaced with a standalone CWS and/or OSMS. The current required device metering information outlined in Technical Standard 2.040 will be maintained on the MGS for each mobile communications device ("MCD") rather than on an MCD itself.

A mobile communications device ("MCD"), when issued to a patron, is used for wagering in conjunction

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<sup>1</sup> "System Based Game" is a gaming device comprised of a server or system part and client stations that, together, form a single integrated device where the system portion of the game determines the outcomes of the individual games conducted on the client stations and the client stations cannot operate independently from the system. Both the system portion and the clients of the system based gaming device will reside in a single gaming establishment.

<sup>2</sup> "System Supported Game" is a gaming device comprised of a collection of conventional gaming devices or client stations connected to a system for the purpose of downloading control programs and other software resources to the conventional gaming device or client station on an intermittent basis. The system portion as well as the client stations are installed in a single gaming establishment. The client stations connected to the system are capable of operating independently from the system once the downloading process has been completed. This configuration encompasses cases where the system may take control of peripheral devices or associated equipment typically considered part of a conventional gaming device such as a bill validator or a printer. In a system supported game, game outcome is determined by the conventional gaming devices or client stations connected to the system and not by the system itself.

<sup>3</sup> "Mobile gaming system" or "system" means a system that allows for the conduct of games through mobile communications devices operated solely within a public area of the licensed gaming establishment by the use of communications technology that allows a patron to bet or wager, and corresponding information related to the display of the game, gaming outcomes or other similar information.

## **Overview of Regulatory System for Mobile Gaming Systems, System Based Games and System Supported Games**

with the MGS. The MCD is used for wagering and to transfer funds to/from an established wagering account. Debit and credit cards will not be directly used in a MCD to replenish wagering accounts.

The MCD, when activated for use, will communicate with the MGS server. The MCD is pre-assigned to specific operating space on the MGS server before it is issued. The term “socket ID” is used to identify the specific pre-assigned operating space, and is used in a similar fashion as a slot machine number for the slot analysis report.

A MCD will always use the same socket ID, regardless of which patrons are using the MCD, unless it is specifically re-assigned. More than one MCD may be assigned to a single socket ID during a day, although both MCDs may not operate at the same time (e.g., if a MCD is lost or destroyed by the patron and a new MCD is issued from inventory the same socket ID may be assigned).

### **System Based Games (SBG)**

SBG is to be operated within one casino with no inter-casino linked play to be conducted.

SBG will basically function in the same manner as a MGS. The SBG may or may not be a self-contained system with a CWS and/or OSMS. Self-contained systems are required to comply with existing Technical Standards and MICS related to CWS and OSMS (see Technical Standards 3.140, 3.150 and 3.160 in Attachment D) and with these proposed requirements. The SBG may be interfaced with a standalone CWS and/or OSMS.

The current required client/device metering information outlined in Technical Standard 2.040 will be maintained on the SBG for each client/device rather than on a client/device itself as provided by Technical Standard 2.045.

A patron will access a client/device which will communicate with the SBG server when the client/device is actively used by a patron. The client/device is pre-assigned to specific operating space on the SBG server. The term “socket ID” will be used to identify the specific pre-assigned operating space. A client/device will always use the same socket ID unless it is specifically re-assigned. More than one client/device may be assigned to a single socket ID during a day, especially if there is a malfunction of a client/device. However, multiple clients/devices cannot be assigned to the same specific operating space (socket ID) on the SBG at the same time.

A switch of client/device at a specific physical location will not result in a change in socket ID. The new client/device will be assigned to the same socket ID. If a client/device is removed from the casino floor, current controls regarding performing a final drop and taking meter readings would apply. Socket ID is used in a similar fashion as a “slot machine number” for the slot analysis report.

### **System Supported Games (SSG)**

A SSG usually communicates information to “thick” clients or conventional gaming devices (slot machines). The SSG includes reconfiguring devices remotely from a game library already on a device, and/or downloading new games to a device into the device’s games library. It does not have a CWS or OSMS as part of the system. Additionally, it does not house client/device metering information. The clients/devices will house the current required metering information.

### **Wagering Accounts**

Patrons can establish wagering accounts to electronically transfer funds from their account to play at a

## **Overview of Regulatory System for Mobile Gaming Systems, System Based Games and System Supported Games**

SBG or a MGS. The wagering account can only be used within the casino in which it is established. An inter-casino linked wagering account cannot be used for wagering at multiple casinos. However, this does not prohibit, based upon specific instructions from a patron, a casino from withdrawing an account balance, and through an inter-company transfer, depositing the funds into a previously established account at an affiliate casino.

Wagering accounts established at the casino will be used for wagering and not for other purposes such as the purchases of merchandise, food, beverages or entertainment venue admissions.

A patron will be allowed to establish one wagering account for all wagering activity within the casino. However, sub-accounts are used within the one wagering account to separate the wagering activity in the various revenue areas (e.g., a sub-account for the race and sports book activity and a sub-account for the MGS). Therefore, to use one wagering account, deposits and withdrawals to/from the separate sub-account balances will be required.

When opening a wagering account, the patron will be required to provide identification along with other required information. Accordingly, no anonymous accounts are allowed. Patron deposits or withdrawals to/from a wagering account are transacted at a cashier's station/kiosk and not at a client station used for wagering.

### **Documentation Requirements**

New documents will be generated from the SBG or MGS game server module/database and not from the CWS or OSMS module/database of the SBG or MGS.

The system will generate documents, on demand or daily, on a day, month, year-to-date basis and two-year cumulative basis. These documents are in addition to other documents required for a cashless wagering system and on-line slot metering system. The reports include a revenue report, Wagering Account Transfer (WAT) In and WAT Out detail reports, MCD assignments report and exceptions report.

The above documentation requirements do not require the system to produce reports regarding other activity that is conducted through the cashless wagering system including the transfer of electronic promotional cashable and non-cashable credits. The required metering maintained by the system (SBG or MGS) and the required reports produced by the cashless wagering system is considered sufficient for these areas as there typically is no impact on taxable revenue for these transactions.

### **Revenue Reporting Process, Audit Procedures and Slot Analysis Report**

#### **MCD Fees and Revenue Reporting**

Annual and quarterly flat fees paid pursuant to Regulation 5.220(3)(g) will be based upon the number of socket IDs that are available to operate MCDs (and not on how many MCDs were issued to patrons or are maintained in inventory).

For SBG and especially for MGS, patron transactions will probably be account wagering transactions against funds on deposit, specifically WAT In and WAT Out.

WAT In and WAT Out transactions are used to compute taxable gaming revenue. WAT In transactions may occur for each wager made or for a bulk transfer amount from which wagers are made (e.g.,

## **Overview of Regulatory System for Mobile Gaming Systems, System Based Games and System Supported Games**

placed on MCD's credit display). In the same way, WAT Out transactions may be for the result of a specific wager or for a bulk transfer amount (e.g., depleting the amount of accumulated credits from MCD's credit display). Reportable revenue is the difference between WAT Ins and WAT Outs, and is referred to as "WAT Win".

Electronic promotional activity for patrons will flow through wagering accounts in a similar manner as wagering account transfers (e.g., player club points converted to wagering credits).

### **Audit Procedures**

Daily, monthly and yearly procedures are to be performed to verify the correct amounts are reported through the accounting records and to compare WAT Win amounts in the different systems (mobile gaming system vs. cashless wagering system). Additionally, a reconciliation of patron wagering accounts and cage accountability is performed. Exception reports provided by the systems are to be reviewed on a daily basis. Other audit procedures include the current audit procedures for the cashless wagering system in Slots MICS and testing for validity of wagering accounts including testing for fraudulent and/or fictitious accounts.

### **Slot Analysis Report**

Slot analysis reports ("SAR") are the primary tool used to evaluate the propriety of reportable revenue. The current requirements relative to a SAR will apply to MGS, SBG and SSG. However, for MGS and SBG information will be compiled for each socket ID rather than for a "slot machine number". The SAR information will include, for a socket ID, the total coin-in for a particular socket ID; a weighted average theoretical hold percentage based on coin-in by payable for the games played associated with a particular socket ID; and other currently required information.

The SAR for an entire casino floor will contain three subsets: MGS, SBG and/or conventional slot machines. There will not be a requirement to change a socket ID when the library of games available for play changes on the system or a requirement regarding the grouping of socket IDs within the MGS subset on the SAR.

The SAR will include win information compared to a floor par estimate of revenue for evaluation purposes. SAR analysis will continue to focus on the proper reporting of cash flow through each device, which is essentially taxable win.

## Project Overview

Nevada Revised Statutes 463.0176, 463.730 and 463.735 were added during the 2005 Nevada legislative session.<sup>4</sup> On November 17, 2005 Technical Standards 1 through 3 were adopted for system based games and system supported games (see Attachment D for Technical Standards). Regulation 5.220<sup>5</sup> and Technical Standard 4 (see Attachment D for Technical Standards) were adopted for mobile gaming systems.

An advisory group of the Board's Audit and Technology Divisions, licensed slot machine manufacturers, licensed operators of a mobile gaming system, casino operators including slot department, accounting and internal audit personnel and CPA firm personnel was formed to discuss system based games ("SBG"), system supported games ("SSG"), and mobile gaming systems ("MGS"). Various topics were discussed involving the operation, documentation requirements, the revenue reporting process, and audit procedures relating to these systems.

From the discussions held, revisions to the Technical Standards were drafted to provide system manufacturers guidance in developing these systems with system controls and providing specified system reports. Additionally, Minimum Internal Control Standards (MICS) were drafted indicating the

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<sup>4</sup> NRS 463.0176 "Mobile gaming" defined. "Mobile gaming" means the conduct of gambling games through communications devices operated solely in public areas of an establishment which holds a nonrestricted gaming license and which operates at least 100 slot machines and at least one other game by the use of communications technology that allows a person to transmit information to a computer to assist in the placing of a bet or wager and corresponding information related to the display of the game, game outcomes or other similar information. For the purposes of this section:

1. "Communications technology" means any method used and the components employed by an establishment to facilitate the transmission of information, including, without limitation, transmission and reception by systems based on wireless network, wireless fidelity, wire, cable, radio, microwave, light, optics or computer data networks. The term does not include the Internet.

2. "Public areas" does not include rooms available for sleeping or living accommodations.

(Added to NRS by [2005, 715](#))

**NRS 463.730 License required to operate, manufacture, sell or distribute mobile gaming system or to manufacture equipment associated with mobile gaming; powers and duties of Commission; regulations; conditions.**

1. Except as otherwise provided in subsection 2, the Commission may, with the advice and assistance of the Board, adopt regulations governing the operation of mobile gaming and the licensing of:

- (a) An operator of a mobile gaming system;
- (b) A manufacturer, seller or distributor of a mobile gaming system; and
- (c) A manufacturer of equipment associated with mobile gaming.

2. The Commission may not adopt regulations pursuant to this section until the Commission first determines that:

(a) Mobile gaming systems are secure and reliable, and provide reasonable assurance that players will be of lawful age and communicating only from areas of licensed gaming establishments that have been approved by the Commission for that purpose; and

(b) Mobile gaming can be operated in a manner which complies with all applicable laws.

3. The regulations adopted by the Commission pursuant to this section must:

(a) Provide that gross revenue received by a licensed gaming establishment or the operator or the manufacturer of a mobile gaming system from the operation of mobile gaming is subject to the same license fee provisions of [NRS 463.370](#) as the other games and gaming devices operated at the licensed gaming establishment.

(b) Provide that a mobile communications device which displays information relating to the game to a participant in the game as part of a mobile gaming system is subject to the same fees and taxes applicable to slot machines as set forth in [NRS 463.375](#) and [463.385](#).

(c) Set forth standards for the location and security of the computer system and for approval of hardware and software used in connection with mobile gaming.

(d) Define "mobile gaming system," "operator of a mobile gaming system," "equipment associated with mobile gaming" and "public area" as the terms are used in this chapter.

(Added to NRS by [2005, 715](#))

**NRS 463.735 Enforceability of mobile gaming debts.** A debt incurred by a patron in connection with playing a mobile gaming system at a licensed gaming establishment is valid and may be enforced by legal process.

(Added to NRS by [2005, 716](#))

<sup>5</sup> Regulation 5.220 Operation of a mobile gaming system.

## Project Overview

procedures for the casinos to implement when operating, auditing and reporting revenue for these systems.

The proposed MICS and revisions to Technical Standards were discussed in a public meeting on August 28, 2007. After considering and responding to public comments, proposed MICS and proposed revisions to the Technical Standards have been accepted as interim policy for the audit and control of MGS, SBG and SSG. It is anticipated the formal adoption process for these MICS and Technical Standards will begin in 2008, along with proposed revisions for other, unrelated sections of the MICS.

The use and/or operation of such systems are summarized in the report attachments as follows:

- Attachment A            Mobile Gaming Systems, System Based Games and System Supported Games– Documentation, Revenue Reporting and Auditing
- This narrative summarizes, for each type of system, a system overview, proposed new documentation requirements, proposed revenue reporting and proposed auditing procedures for SBG, SSG, and MGS. This attachment also addresses the slot analysis report and how this report applies to SBG, SSG and MGS.
- Attachment B            Auditing Slot Revenue (SBG/MGS)
- Attachment B illustrates the flow of slot revenue to the slot analysis report (SAR); the meters used to prove different components of slot revenue; and the SAR format. A by-paytable report format is illustrated to demonstrate this form of analysis will not detect a potential count room theft. The by-paytable analysis report is not required by the Gaming Control Board.
- Attachment C            SBG/MGS Information Processing Flowchart and Proposed SBG/MGS Reports
- Attachment C is a flowchart of information processing for a SBG/MGS along with related proposed example reports. The reports will be used for the auditing procedures required by Slots MICS.
- Attachment D            Proposed Revisions to Technical Standards for MGS, SBG, and SSG
- Attachment D consists of the Regulation 14 Technical Standards with proposed amendments to the standards.
- Attachment E            Proposed Revisions to Minimum Internal Control Standards for MGS, SBG and SSG
- Attachment E contains the proposed Minimum Internal Control Standards (MICS) associated with the operation of MGS, SBG and SSG to be considered for adoption.

# **Attachment A**

## **Mobile Gaming Systems, System Based Games And System Supported Games – Documentation, Revenue Reporting and Auditing**

This attachment summarizes, for each type of system, a system overview, proposed new documentation requirements, proposed revenue reporting and proposed auditing procedures for SBG, SSG, and MGS. This attachment also addresses the slot analysis report and how this report applies to SBG, SSG and MGS.

**Attachment A**  
**Mobile Gaming Systems, System Based Games and**  
**System Supported Games –**  
**Documentation, Revenue Reporting and Auditing**

**Overview**

Documentation requirements, revenue reporting procedures and auditing procedures need to be established for:

- Mobile Gaming Systems (“MGS”)
- System Based Games (“SBG”) and
- System Supported Games (“SSG”).

In order to report and audit gaming revenue, we propose requiring certain documents be created. These new documents, along with current requirements, will provide a basis for revenue reporting and in turn the audit thereof.

This narrative includes:

- For each of the three types of systems:
  - A general description of the functionality of system for internal control purposes
  - Proposed documentation
  - Proposed revenue reporting
  - Proposed auditing procedures
- For all three systems a description of:
  - Integrity of games procedures
  - Slot analysis reporting requirements

**MGS**

**Overview of MGS Operations**

An MGS will basically function as follows:

- The MGS may or may not be a self-contained system with a cashless wagering system (“CWS”) and/or on-line slot metering system (“OSMS”).
  - Self-contained systems are required to comply with existing Technical Standards and MICS related to CWS and OSMS (see Technical Standards 3.140, 3.150 and 3.160) and with these proposed requirements.
  - The MGS may be interfaced with a standalone CWS and/or OSMS.
- The current required device metering information outlined in Technical Standard 2.040 will be maintained on the MGS for each mobile communications device (“MCD”) rather than on an MCD itself.
- Patron transactions will be as follows:
  - A patron will be issued a MCD.
  - The MCD will communicate with the MGS server when the MCD is actively used by a patron.
  - The MCD is pre-assigned to specific operating space on the MGS server before it is issued.
    - The term “socket ID” will be used to identify the specific pre-assigned operating space.
      - A MCD will always use the same socket ID, regardless of which patrons are using the MCD, unless it is specifically re-assigned.
      - More than one MCD may be assigned to a single socket ID

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during a day, although both MCDs may not operate at the same time (e.g., when MCD is destroyed by the patron and new MCD is issued from inventory).

- Socket ID is used in a similar fashion as a slot machine number is used, and that identifier will be included in slot analysis reports as discussed later in this document.
- Regulation 5.220(3)(g) flat fees will be based upon the number of socket IDs that are available to operate MCDs (and not on how many MCDs were issued to patrons or are maintained in inventory).
- Most if not all patron transactions will probably be account wagering transactions against funds on deposit, specifically:
  - Wagering account transfer in (“WAT In”) and
  - Wagering account transfer out (“WAT Out”).WAT In and WAT Out transactions are used to compute taxable gaming revenue. WAT In transactions may occur for each wager made or for a bulk transfer amount from which wagers are made (e.g., placed on MCD’s credit display). In the same way, WAT Out transactions may be for the result of a specific wager or for a bulk transfer amount (e.g., depleting the amount of accumulated credits from MCD’s credit display).
- Electronic promotional activity for patrons will flow through wagering accounts in a similar manner as wagering account transfers (e.g., player club points converted to wagering credits).

Proposed New Documentation Requirements for MGS

The new documents will be generated from the MGS game server module/database and not from the CWS or OSMS module/database of the MGS. Documentation requirements will eventually be added to Technical Standard 3 (see Attachment D) and will include:

- MGS will generate documents on a day, month, year-to-date basis and two-year cumulative basis.
- The MGS will be designed so that documents can be produced daily or on demand.
- MGS documentation is in addition to other documentation required for a CWS and OSMS, as applicable (see Technical Standards 3.140, 3.150 and 3.160).
- Reports include:
  - Revenue report. By socket ID and in total, amount of WAT In, WAT Out and WAT Win. [Proposed TS 3.161(1)(c)]
  - WAT In and WAT Out detail report. Detailed information by wagering account [Proposed TS 3.161(1)(d)] and by socket ID [Proposed TS 3.161(1)(e)]. Information is to include details of each transfer to and each transfer from a socket ID.
    - WAT In and WAT Out information accumulated by wagering account for each socket ID.
    - WAT In and WAT Out information accumulated by socket ID for each wagering account.
  - MCD Assignments Report. MCD assignments by socket ID and by MCD [Proposed TS 3.161(2)]. Indicates the number of socket IDs available to operate MCDs.

**Attachment A**  
**Mobile Gaming Systems, System Based Games and**  
**System Supported Games –**  
**Documentation, Revenue Reporting and Auditing**

- Exceptions.

The above documentation requirements do not require the MGS to produce reports regarding other activity that is conducted through the cashless wagering system including the transfer of electronic promotional cashable and non-cashable credits. The required metering maintained by the MGS and the required reports produced by the cashless wagering system is considered sufficient for these areas as there typically is no impact on taxable revenue for these transactions.

Note: See Attachment C for Information Processing Flowchart (page 17).

Proposed Revenue Reporting for MGS

For a MGS with only WAT activity, reportable revenue is the difference between WAT Ins and WAT Outs, and is referred to as “WAT Win”.

- The WAT Win amount (from MGS) is on the MGS revenue report.
- WAT Win (from CWS) will flow through cage records to the accounting records, as patrons’ outstanding wagering account balances will be reflected in the cage’s accountability [See Attachment D, Proposed TS 3.160(13)].

Proposed Auditing for MGS

To audit WAT Win:

- Daily, monthly and yearly procedures are generally as follows:
  - Verify the correct amounts are reported through the accounting records (see similar procedures in current Slots MICS #190k and #191).
  - Compare WAT Win amounts in the different systems (MGS vs. CWS).
  - Reconciliation of patron wagering accounts and cage accountability (see similar procedures in current Slots MICS #159, #160 and #161 and Attachment C page 20).
  - Review MGS exception reports (see similar procedure in current Slots MICS #189).

Other audit procedures to include:

- Current audit procedures for CWS in Slots MICS.
- Testing for validity of wagering accounts including testing for fraudulent and/or fictitious accounts.
  - Required reports relative to wagering accounts will be used for:
    - The reconciliation of patron accounts and
    - Patron disputes.

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Below is a more detailed chart of some of the audit procedures:

Report	Audit Procedure	Procedure Objective
“WAT In and WAT Out Detail Report (by socket ID)” and “Revenue Report (by socket ID)”	For each day, compare the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win indicated on the “Revenue Report” to the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win on the “WAT In and WAT Out Detail Report (by socket ID)”	Completeness test – The total dollar amount of WAT In, WAT Out and total dollar amount of WAT Win recorded in the MGS/SBG system agree in all MGS/SBG reports.
“Revenue Report (by socket ID)” and CWS’s “Patron Wagering Account Detail Report” [required by TS 3.160(13)]	For each day, compare the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win indicated on the “Revenue Report” to the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win on the CWS’s “Patron Wagering Account Detail Report”	Completeness test – The total dollar amount of WAT In, WAT Out and total dollar amount of WAT Win recorded in the MGS/SBG system agree with the CWS reports.
CWS’s “Patron Wagering Account Detail Report” and “Cage Accountability”	For each day, compare the WAT Win amount indicated on the CWS’s “Patron Wagering Account Detail Report” to the total dollar amount of WAT Win indicated in the “Cage Accountability.”	Asset protection – Verify the cage is properly accounting for outstanding wagering account balances. Revenue test – Verify WAT Win is posted as revenue in cage documents.
“WAT In and WAT Out Detail Report (by wagering account)” and CWS’s “Patron Wagering Account Detail Report”	For each day, randomly select two WAT In transactions and two WAT Out transactions from the “WAT In and WAT Out Detail Report (by wagering account)” and trace the transaction to the CWS’s “Patron Wagering Account Detail Report”	Validity test – Confirm that individual transactions are properly recorded to a patron’s wagering account.

**SBG**

**Overview of SBG Operations**

An SBG will basically function in the same manner as a MGS. The SBG will function as follows:

- The SBG may or may not be a self-contained system with a CWS and/or OSMS.
  - Self-contained systems are required to comply with existing Technical Standards and MICS related to CWS and OSMS (see Technical Standards 3.140, 3.150 and 3.160) and with these proposed requirements.
  - The SBG may be interfaced with a standalone CWS and/or OSMS.
- The current required client/device metering information outlined in Technical

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Standard 2.040 will be maintained on the SBG for each client/device rather than on a client/device itself as provided by Technical Standard 2.045.

- Patron transactions will be as follows:
  - A patron will access a client/device which will communicate with the SBG server when the client/device is actively used by a patron.
  - The client/device is pre-assigned to specific operating space on the SBG server.
    - The term “socket ID” will be used to identify the specific pre-assigned operating space.
      - A client/device will always use the same socket ID unless it is specifically re-assigned.
      - More than one client/device may be assigned to a single socket ID during a day, although both clients/devices may not operate at the same time, especially if there is a malfunction of a client/device.
      - A switch of client/device at a specific physical location will not result in a change in socket ID. The new client/device will be assigned to the same socket ID. If a client/device is removed from the casino floor, current controls regarding performing a final drop and taking meter readings would apply.
      - Socket ID is used in a similar fashion as a “slot machine number” is used, and that identifier will be included in slot analysis reports discussed later in this document.
  - Patron transactions will include account wagering transactions.
    - Electronic promotional activity for patrons will flow through wagering accounts in a similar manner as wagering account transfers (e.g., player club points converted to wagering credits).
  - Patron transactions will include cash, coupon and voucher activity.
  - The SBG will be connected to a stationary client/device (i.e., most likely appearing similar to regular slot machine) and probably will also have cash, coupon and voucher features.

Proposed New Documentation Requirements for SBG

Documentation requirements will be the same as that proposed for a MGS when account wagering is utilized.

Proposed Revenue Reporting for SBG

If the SBG has devices that allow cash, coupon and voucher activity, then there are more components of reportable revenue than WAT Win as in a MGS environment.

- For a SBG, with only WAT activity, reportable revenue is the difference between WAT Ins and WAT Outs, and is referred to as WAT Win.
  - This amount is on the SBG revenue report.
- If the SBG allows cash, coupons and vouchers, the reportable revenue includes:
  - Cash activity
  - Coupon activity
  - Voucher activity and
  - WAT Win.

**Attachment A**  
**Mobile Gaming Systems, System Based Games and**  
**System Supported Games –**  
**Documentation, Revenue Reporting and Auditing**

- WAT Win (from CWS) will flow through cage records to the accounting records, as patrons' account balances will be reflected in the cage's accountability.
- Cash, coupon and voucher activity will be accounted for in the current manner (i.e., currency acceptors drop proceeds, attendant pays, vouchers issued from a slot machine/device, etc.).

Proposed Auditing for SBG

In addition to current existing controls over cash and voucher activity, auditing of WAT Win and wagering accounts will be required. The same auditing procedures as proposed for MGS will be required.

**SSG**

Overview of SSG Operations

A SSG usually:

- Communicates information to “thick” clients or conventional gaming devices (slot machines).
- Includes reconfiguring devices remotely from a game library already on a device, and/or downloading new games to a device into the device's games library.
- Does not have a CWS or OSMS as part of the system.
- Does not house client/device metering information. The clients/devices will house the current required metering information.

Proposed New Documentation Requirements for SSG

There are no additional proposed documentation requirements.

Proposed Revenue Reporting and Auditing for SSG

Revenue reporting and auditing procedures will be the same as currently required for conventional gaming devices (slot machines) although calculation of weighted average par percentages will be more complex due to the additional paytables that could be activated.

**Integrity of Games Procedures for MGS, SBG and SSG**

In addition to the verification of games procedures incorporated in the MGS, procedures will be required whereby a manufacturer will ensure that a sample of game programs on the games server have not been tampered with on the MGS similar to the procedure in current Slots MICS # 91. The requirements regarding the integrity of games for a SBG will be the same as that for a MGS. SSG will continue to comply with Slots MICS #91 which requires the verification of game programs (EPROMS) on the devices.

**Attachment A**  
**Mobile Gaming Systems, System Based Games and**  
**System Supported Games –**  
**Documentation, Revenue Reporting and Auditing**

**Slot Analysis Reports for MGS, SBG and SSG**

**MGS**

Slot analysis reports (“SAR”) are the primary tool used to evaluate the propriety of reportable revenue. Refer to Attachment B which illustrates how the SAR is used as a tool in analyzing reported slot revenue. Most current requirements relative to SAR (Slots MICS and Technical Standards 3.140 and 3.160) will be implemented for a MGS:

- Information will be compiled for each socket ID rather than for a “slot machine number”.
- SAR information will include, for a socket ID:
  - The total coin-in for a particular socket ID;
  - A weighted average theoretical hold percentage based on coin-in by payable for the games played on the MCDs assigned to a particular socket ID; and
  - The other currently required information listed in Technical Standards 3.140(2) and 3.160(24), and the Slots MICS.
- There will not be a requirement to change a socket ID when the library of games available for play changes on the MGS.
- The SAR for an entire casino floor will contain three subsets: MGS, SBG and conventional slot machines. There will not be a requirement regarding the grouping of socket IDs within the MGS subset on the SAR.
- The SAR may be a MGS report or an OSMS report if the MGS is combined with the OSMS similar to the requirements of Technical Standard 3.160(24).
- This SAR will include win information compared to a floor par estimate of revenue for evaluation purposes. SAR analysis will continue to focus on the proper reporting of cash flow through each device, which is essentially taxable win.

At this point, a “by-paytable” slot performance report will not be required by the Board. The MICS will not require licensees to use such reports. We recognize that since numerous MCDs will be using the same payable on the MGS, it makes sense to accumulate all the wagering activity for a single game that was accessed by all the MCDs and evaluate game performance by game (or payable) rather than by socket ID.

Although Technical Standard 2.040(1)(a)(2) requires coin-in metering by payable, coin-out metering by payable is not currently required. Because of this limitation, it is our understanding that current MGS are not designed to determine the various types of “payouts” by payable and calculate metered win by payable and, thus, will not be designed to allow for the calculation of an actual hold percentage by payable. Therefore, it is not recommended that a technical standard be adopted for coin out metering by payable.

However, if manufacturers design an MGS in such a fashion where metered win can be computed by payable and a by-paytable slot performance report can be produced (example provided in Attachment B as an “Optional Report”), such a report will be considered an optional, “additional” report.

- The report will not be required to be used for auditing revenue purposes.
- Such a report will be more useful to operations (slot departments) than to auditors.

**Attachment A**  
**Mobile Gaming Systems, System Based Games and**  
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**Documentation, Revenue Reporting and Auditing**

- The report may be used to ensure the regulatory minimum 75% payback for a game (analysis based upon meter information rather than actual payback information).

**SBG**

Most current requirements relative to SAR will be implemented for a SBG. The SAR will have the same features and requirements as that for the MGS, including having the information compiled by socket ID.

A by-paytable slot performance report will not be required for the same reasons as described for MGS. Additionally, a by-paytable performance report will not address the cash and voucher activity that flow through the client/device and thus cannot replace a traditional SAR.

**SSG**

Currently designed/required SAR will continue to be used with information compiled by client/device and will be included in the subset of conventional gaming devices on the SAR. However, the current requirement to change a client/device identifier when the library of games available for play changes on a client/device (see current Slots MICS #113) will not apply to clients/devices where the meter information can be historically retained for any game removed from the client/device.

A by-paytable slot performance report will not be required for the same reasons as described for MGS and SBG.

## Attachment B

### Auditing Slot Revenue (SBG/MGS)

Note: This attachment illustrates the flow of slot revenue to the slot analysis report (SAR); the meters used to prove different components of slot revenue; and the SAR format. A by-paytable report format is illustrated to demonstrate this form of analysis will not detect a potential count room theft. The by-paytable analysis report is not required by the Gaming Control Board and the MICS will **not** require licensees to create or maintain this type of report. Although Technical Standard 2.040(1)(a)(2) requires coin-in metering by payable, coin-out metering by payable is not currently required. Without coin-out by payable, metered win and actual hold percentage by payable cannot be calculated by the system. A technical standard is not proposed to require coin out metering by payable.

## Attachment B Auditing Slot Revenue (SBG/MGS)

### Slot Revenue Summary (Socket ID #111)

Type of Drop (Reg. 1.095)	Amount	Type of Payouts (Reg. 1.140)	Amount	Taxable Win	Amount
Currency/Coin [TS 3.140(3)]	\$ 7,015	Attendant payouts [TS 3.140(4)]	\$ 4,500	Total Drop	\$ 13,060
Vouchers [TS 3.160(18) & (19)]	5,500	Vouchers issued [TS 3.160(20)]	3,450	Total Payouts	\$ 9,240
<b>Count Room Drop</b> (amount removed from gaming device)	<u>\$ 12,515</u>	<b>Attendant payouts/vouchers issued</b>	<u>\$ 7,950</u>	Total Win [TS 3.140(11)]	<u>\$ 3,820</u>
WAT In [TS 3.160 (10)] and [Proposed TS 3.161(1)(c)]	\$ 445	Electronic payouts: WAT out [TS 3.160(11)] and [Proposed TS 3.161(1)(c)]	<u>\$ 200</u>		
EFT In [TS 3.160(9)]	100	Hopper Fills [TS 3.140(5)]	<u>\$ 1,090</u>		
<b>Electronic Drop</b> (amount from cashless wagering system)	<u>\$ 545</u>				

To simplify this example, the following will not be included:

- External bonuses
- External progressives
- Electronic promotions
- Coupon promotions
- Payout receipts

References to a TS # in the Slot Revenue Summary section is the technical standard report comparing reported amount to gaming device meter amount (i.e., "proof" reports).

\$5,000 variance between bill-in meter (which was \$12,015) and actual currency count in count room.

### Slot Analysis Report (Socket ID #111)

Socket ID#	Weighted Theo %	Coin in	Count Room Drop (+)	Electronic Drop (+)	Attendant payouts & Vouchers issued (-)	Electronic payouts (-)	Hopper Fills (-)	Taxable Win (=)	Actual Hold % (Win/ Coin in)	% Variance (Over/ Under)	\$ Variance (Over/ Under)
111	8.08	123,715	12,515.00	545.00	7,950.00	200.00	1,090.00	\$ 3,820.00	3.09	(4.99)	\$(6,176.17)

### Paytable Analysis Report (Socket ID #111) [Optional Report]

Par %	Paytable ID	Coin In (from meter) (+)	Coin Out* (from meter) (-)	Metered Win (=)	Theo Win	\$ Variance Over/(Under)
9.97	SB100293	17,211.00	15,786.00	1,425.00	1,715.94	(290.94)
9.99	SB100831	12,000.00	10,555.00	1,445.00	1,198.80	246.20
7.487	SP01271	94,504.00	88,554.00	5,950.00	7,075.51	(1,125.51)
Totals		123,715.00	\$ 114,895.00	\$ 8,820.00	\$ 9,990.25	\$ (1,170.25)

\$5,000 Variance

**Purpose of Paytable Analysis Report:**

- Assuring >75% payback for each game
- Monitor coin in by payable (slot dept. will want to evaluate game play)
- If large underholding variance, could indicate gaffed program.
- If large variance in SBG payable, could drill down into a device report to see which device(s) contributed to the payable performance being below expectations

\*Note: Coin out meter is currently not required by payable; assume this meter accumulates all payable-related payouts.

# **Attachment C**

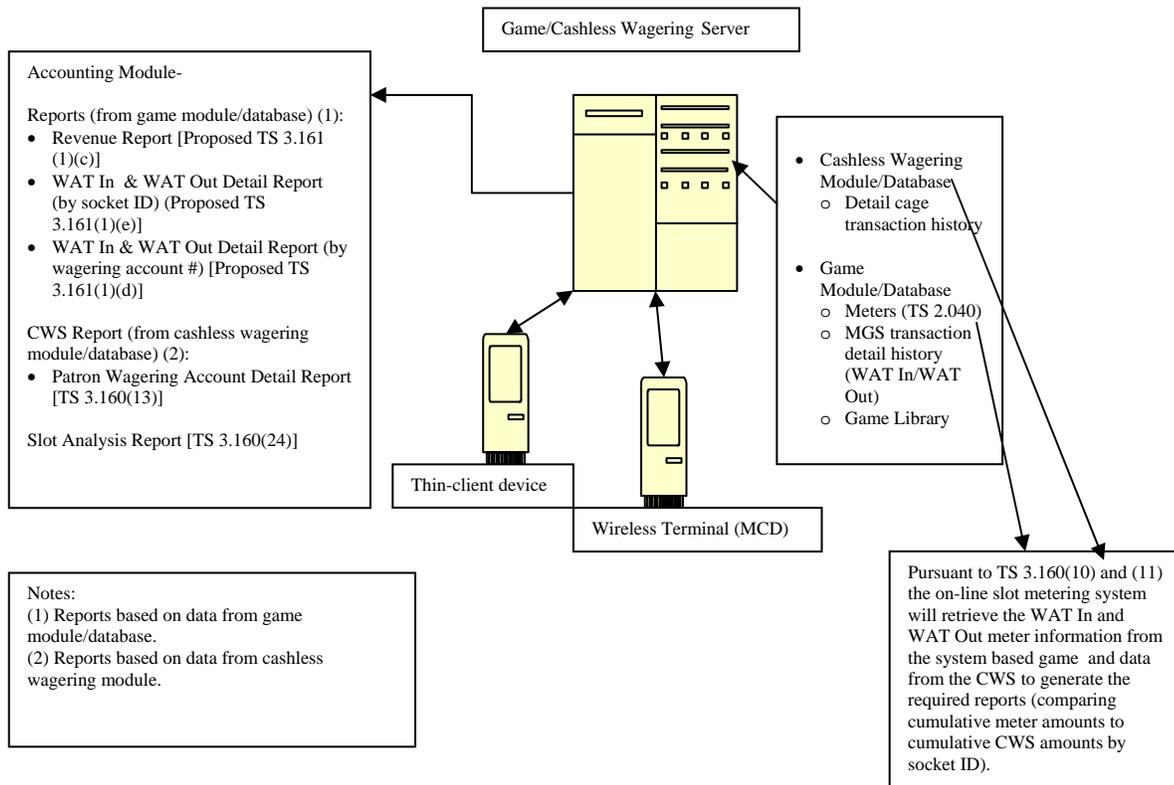
## **SBG/MGS Information Processing Flowchart And Proposed SBG/MGS Reports**

Note: This attachment includes a flowchart of information processing for a SBG/MGS along with related example reports. The reports will be used for the auditing procedures required by Slots MICS.

## Attachment C

### SBG/MGS Information Processing Flowchart

This flowchart illustrates the movement of only wagering account transfers (in and out) from a thin-client station (for a SBG) or a mobile communications device (for a MGS) through the cashless wagering system to the system based game (for a SBG or MGS). The stored data from the system based game (for a SBG or MGS) and from the cashless wagering system is retrieved to generate accounting reports (accounting module).



## Attachment C

### Proposed SBG/MGS Reports

(Produced by SBG/MGS)

The information in the proposed reports is based on the data from the system based game.

**Revenue Report [Proposed TS 3.161(1)(c)]**

Socket ID	WAT In	WAT Out	WAT Win
1	4,600	1,755	2,845
2	12,775	2,810	9,965
3	3,505	5,300	(1,795)
4	2,600	200	2,400
5	700	5,200	(4,500)
Totals	\$ 24,180	\$ 15,265	\$ 8,915

**WAT In and WAT Out Detail Report (by Socket ID)**

**[Proposed TS 3.161(1)(e)]**

Socket ID	Wagering Acct #	Date/Time	WAT In	WAT Out	WAT Win
1	1234	xx/xx/xx xx:xx	2,000		
1	1234	xx/xx/xx xx:xx		500	
1	1235	xx/xx/xx xx:xx	800		
1	1234	xx/xx/xx xx:xx	1,800		
1	1235	xx/xx/xx xx:xx		5	
1	1234	xx/xx/xx xx:xx		1,250	
Totals			\$ 4,600	\$ 1,755	\$ 2,845
2	1236	xx/xx/xx xx:xx	10,175		
2	1236	xx/xx/xx xx:xx		1,010	
2	1234	xx/xx/xx xx:xx	2,600		
2	1234	xx/xx/xx xx:xx		1,800	
Totals			\$ 12,775	\$ 2,810	\$ 9,965
3	1235	xx/xx/xx xx:xx	800		
3	1234	xx/xx/xx xx:xx	500		
3	1235	xx/xx/xx xx:xx		800	
3	1236	xx/xx/xx xx:xx	1,000		
3	1236	xx/xx/xx xx:xx		1,200	
3	1236	xx/xx/xx xx:xx	1,200		
3	1234	xx/xx/xx xx:xx		500	
3	1236	xx/xx/xx xx:xx		2,600	
3	1235	xx/xx/xx xx:xx	5		
3	1235	xx/xx/xx xx:xx		200	
Totals			\$ 3,505	\$ 5,300	\$ (1,795)
4	1235	xx/xx/xx xx:xx	2,600		
4	1235	xx/xx/xx xx:xx		200	
Totals			\$ 2,600	\$ 200	\$ 2,400
5	1234	xx/xx/xx xx:xx	500		
5	1235	xx/xx/xx xx:xx	200		
5	1234	xx/xx/xx xx:xx		2,600	
5	1235	xx/xx/xx xx:xx		2,600	
Totals			\$ 700	\$ 5,200	\$ (4,500)
Grand Totals			\$ 24,180	\$ 15,265	\$ 8,915

**WAT In and WAT Out Detail Report (by Wagering Account #)**

**[Proposed TS 3.161(1)(d)]**

Wagering Acct #	Socket ID	Date/Time	WAT In	WAT Out	WAT Win
1234	1	xx/xx/xx xx:xx	2,000		
1234	1	xx/xx/xx xx:xx		500	
1234	1	xx/xx/xx xx:xx	1,800		
1234	1	xx/xx/xx xx:xx		1,250	
1234	2	xx/xx/xx xx:xx	2,600		
1234	2	xx/xx/xx xx:xx		1,800	
1234	3	xx/xx/xx xx:xx	500		
1234	3	xx/xx/xx xx:xx		500	
1234	5	xx/xx/xx xx:xx	500		
1234	5	xx/xx/xx xx:xx		2,600	
Totals			\$ 7,400	\$ 6,650	\$ 750
1235	1	xx/xx/xx xx:xx	800		
1235	1	xx/xx/xx xx:xx		5	
1235	3	xx/xx/xx xx:xx	800		
1235	3	xx/xx/xx xx:xx		800	
1235	3	xx/xx/xx xx:xx	5		
1235	3	xx/xx/xx xx:xx		200	
1235	4	xx/xx/xx xx:xx	2,600		
1235	4	xx/xx/xx xx:xx		200	
1235	5	xx/xx/xx xx:xx	200		
1235	5	xx/xx/xx xx:xx		2,600	
Totals			\$ 4,405	\$ 3,805	\$ 600
1236	2	xx/xx/xx xx:xx	10,175		
1236	2	xx/xx/xx xx:xx		1,010	
1236	3	xx/xx/xx xx:xx	1,000		
1236	3	xx/xx/xx xx:xx		1,200	
1236	3	xx/xx/xx xx:xx	1,200		
1236	3	xx/xx/xx xx:xx		2,600	
Totals			\$ 12,375	\$ 4,810	\$ 7,565
Grand Totals			\$ 24,180	\$ 15,265	\$ 8,915

**Attachment C**  
**Proposed SBG/MGS Reports**  
**(Produced by Cashless Wagering System)**

Patron Wagering Account Detail [TS 3.160(13)]

Wagering Account Number	Player Name	Date and Time of Transaction	Beginning Balance	Socket ID #	Deposit	WAT In	WAT Out	WAT Win	Withdrawal	Adjustments Add/(Reduce)	Ending Balance
1234	Player A	xx/xx/xx xx:xx	0		2,000						2,000
		xx/xx/xx xx:xx	2,000	1		2,000					0
		xx/xx/xx xx:xx	0	1			500				500
		xx/xx/xx xx:xx	500	3		500					0
		xx/xx/xx xx:xx	0	3			500				500
		xx/xx/xx xx:xx	500	5		500					0
		xx/xx/xx xx:xx	0	5			2,600				2,600
		xx/xx/xx xx:xx	2,600	2		2,600					
		xx/xx/xx xx:xx	0	2			1,800				1,800
		xx/xx/xx xx:xx	1,800	1		1,800					0
		xx/xx/xx xx:xx	0	1			1,250				1,250
		xx/xx/xx xx:xx	1,250						50		1,300
		xx/xx/xx xx:xx	1,300							500	
Totals			0		2,000	7,400	6,650	750	500	50	800
1235	Player B	xx/xx/xx xx:xx	800	3		800					0
		xx/xx/xx xx:xx	0	3			800				800
		xx/xx/xx xx:xx	800	1		800					0
		xx/xx/xx xx:xx	0	1			5				5
		xx/xx/xx xx:xx	5	3		5					0
		xx/xx/xx xx:xx	0	3			200				200
		xx/xx/xx xx:xx	200	5		200					0
		xx/xx/xx xx:xx	0	5			2,600				2,600
		xx/xx/xx xx:xx	2,600	4		2,600					0
		xx/xx/xx xx:xx	0	4			200				200
Totals			800		0	4,405	3,805	600	0	0	200
1236	Player C	xx/xx/xx xx:xx	10,175	2		10,175					0
		xx/xx/xx xx:xx	0	2			1,010				1,010
		xx/xx/xx xx:xx	1,010	3		1,000					10
		xx/xx/xx xx:xx	10	3			1,200				1,210
		xx/xx/xx xx:xx	1,210	3		1,200					10
		xx/xx/xx xx:xx	10	3			2,600				2,610
		xx/xx/xx xx:xx	2,610						600		2,010
		Totals			10,175		0	12,375	4,810	7,565	600
Grand Totals			10,975		2,000	24,180	15,265	8,915	1,100	50	3,010

Note: Refer to page 20 for using this report to comply with Slots MICS.

## Attachment C

### Proposed SBG/MGS Reports

The "Patron Wagering Account Detail" report shown on page 19 meets the documentation requirement of Slots MICS #158 (see below). This report is to be used in the reconciliation process required by Slots MICS #159 (see below).

#### **Slots MICS #155 (V5)**

"A deposit/withdrawal, other than through actual slot machine play, is evidenced by at least a two-part document, with one part remaining in the cashier's area and the other part given to the patron when a deposit or withdrawal is made. An adjustment to a patron's wagering account is also documented and maintained."

#### **Slots MICS #158 (V5)**

"Procedures are established to maintain a detailed record for each patron's wagering account that includes the dollar amount of all funds deposited and withdrawn specifically to or from the slot wagering account, account adjustments made, and the transfers to/from slot machines. This record is available to the patron upon request."

#### **Slots MICS #159 (V5)**

"The total of all slot wagering accounts are reconciled by employees of the designated area of accountability, as follows:

- a. For each shift, generate a report from the cashless wagering system that details the beginning and ending balance of wagering accounts, adjustments to wagering accounts, and the wagering account transfers to and from slot machines.
- b. Reconcile the ending and beginning balances (per the system) to the hard copy deposit/withdrawal documentation, account adjustment documentation, and the wagering account transfers (per the system)."

#### **Reconciliation Process:**

1. A cage cashier will generate the "Patron Wagering Account Detail" (PWAD) report (as shown on page 19) at the end of their shift. [Slots MICS #159(a)]
2. The ending balance is \$3,010 and the beginning balance is \$10,975. The change in balance is reconciled as follows: [Slots MICS #159(b)]

Beginning balance	\$10,975	
Deposits (+)	2,000	(use deposit receipts required by Slots MICS #155)
WAT In (-)	-24,180	(use amount recorded on PWAD report)
WAT Out (+)	15,265	(use amount recorded on PWAD report)
Withdrawal (-)	-1,100	(use withdrawal receipts required by Slots MICS #155)
Adjustments (+/-)	50	(use documentation to evidence adjustment Slots MICS #155)
Ending Balance	\$ 3,010	

#### **Slots MICS #160 (V5)**

"All slot wagering account deposits/withdrawals, account adjustments, and wagering account transfers to/from slot machines are summarized in total on an accountability form on at least a per shift basis."

#### **Accountability:**

The accountability form will indicate the shift ending balance of outstanding wagering account funds being held for the patrons. In this example, the amount to record for shift end is \$3,010 (supported by the PWAD report).

#### **Slots MICS #161 (V5)**

"Slot department wagering account revenue (transfers to slot machines less transfers from slot machines) is summarized and posted as a single line item on an accountability form on at least a daily basis."

#### **Wagering Account Revenue:**

The accountability form will indicate the amount of WAT Win. The WAT Win for the shift is \$8,915 and would be recorded as wagering account revenue on the accountability form (supported by the PWAD report).

**Attachment C**  
**Proposed SBG/MGS Reports**  
**(Produced by OSMS)**

The slot analysis report illustrates the performance of either a thin-client or a mobile communications device assigned to a specific socket ID for only WAT In and WAT Out transactions. This report would need to be modified for other forms of funds/drop (cash, coin, vouchers, promotional funds) and associated payouts in reporting slot revenue (as illustrated in Attachment B).

**Slot Analysis Report**

Socket ID	Weighted Theo	Coin in (1)	WAT In (2)	WAT Out (2)	WAT Win	Actual Hold %	% Variance	\$ Variance over/under
			(+)	(-)	(-)	(WAT win/coin in)	over/under	under
1	9.94	29,500.00	4,600.00	1,755.00	2,845.00	9.64	-0.29	-86.53
2	9.44	65,775.00	12,775.00	2,810.00	9,965.00	15.15	5.71	3,753.97
3	8.15	10,505.00	3,505.00	5,300.00	-1,795.00	-17.09	-25.24	-2,651.31
4	9.66	12,600.00	2,600.00	200.00	2,400.00	19.05	9.38	1,182.41
5	8.73	15,000.00	700.00	5,200.00	-4,500.00	-30.00	-38.73	-5,809.06
<b>Totals</b>	<b>9.39</b>	<b>133,380.00</b>	<b>24,180.00</b>	<b>15,265.00</b>	<b>8,915.00</b>	<b>6.68</b>	<b>-2.71</b>	<b>-3,610.53</b>

**Supporting Calculation of Weighted Theo**

Socket ID	Par %	Paytable ID	Coin in (from payable meter)	
1	9.97	SB100293	15,000.00	Calculation of Weighted Par % for Socket ID #1: $[(15,000/29,500)*9.97\%]+[(14,000/29,500)*9.99\%]+[(500/29,500)*7.487\%]= 9.94\%$
1	9.99	SB100831	14,000.00	
1	7.487	SP01271	500.00	
		<b>Total</b>	<b>29,500.00</b>	Calculation of Floor Par %: $((29,500/133,380)*9.94\%)+((65,775/133,380)*9.44\%)+((10,505/133,380)*8.15\%)+((12,600/133,380)*9.66\%)+((15,000/133,380)*8.73\%)=9.39\%$
2	9.97	SB100293	38,000.00	
2	9.99	SB100831	13,700.00	
2	7.487	SP01271	14,075.00	
		<b>Total</b>	<b>65,775.00</b>	
3	9.97	SB100293	1,400.00	
3	9.99	SB100831	1,400.00	
3	7.487	SP01271	7,705.00	
		<b>Total</b>	<b>10,505.00</b>	
4	9.97	SB100293	5,500.00	
4	9.99	SB100831	5,500.00	
4	7.487	SP01271	1,600.00	
		<b>Total</b>	<b>12,600.00</b>	
5	9.97	SB100293	2,300.00	
5	9.99	SB100831	5,150.00	
5	7.487	SP01271	7,550.00	
		<b>Total</b>	<b>15,000.00</b>	
<b>Grand Total</b>			<b>133,380.00</b>	

Notes:

- (1) Pursuant to TS 3.140(2)(a)(3) the on-line slot metering system will retrieve the coin in meter information from the system based game.
- (2) Pursuant to TS 3.160(24) the on-line slot metering system will retrieve the WAT In and WAT Out meter information from the system based game.

# **Attachment D**

## **Proposed Revisions to Technical Standards for MGS, SBG, and SSG**

Note: This attachment consists of the Regulation 14 Technical Standards with proposed amendments to the standards. Bold/underlined language denotes additions; strikethrough language denotes deletions

## Attachment D

### Proposed Revisions to Technical Standards for MGS, SBG, and SSG

#### Introduction

These Technical Standards are primarily intended for use by licensed manufacturers as a guidance document for the development, implementation, and installation of system based games, system supported games and mobile gaming systems. This guidance will be considered interim Board policy until the Technical Standard revisions are formally adopted.

Note: Bold/underlined language denotes additions; strikethrough language denotes deletions

#### TECHNICAL STANDARDS FOR GAMING DEVICES AND ON-LINE SLOT SYSTEMS

**1.010 Definitions.** As used in these standards unless the context requires otherwise:

1. "Alterable media" means any form of storage device that allows the modification of the programs or data on the device during the normal operation of the gaming device. This does not include devices typically considered to be alterable but through either software or hardware means approved by the chairman, have been rendered un-alterable.

2. "Cashable credits" means the monetary units displayed on a credit meter that are redeemable for cash.

3. **[Effective on 11/1/07]** "Cashless Wagering Kiosk" is a device capable of accepting or generating wagering instruments and/or wagering credits or is capable of initiating electronic transfers of money to or from a wagering account or is used to facilitate other forms of cashless wagering functionality.

4. "Chairman" means the chairman of the state gaming control board or his designee.

5. "Complete voucher" means a voucher which contains, at a minimum, a complete validation number and is of a quality that can be redeemed through the use of an automated reader or scanner.

6. "Conventional ROM Device" is a device incapable of being altered while installed in a gaming device and may contain executable programs or data that are directly addressed by a processor.

7. "Credit meter" means a slot machine indicator that displays the number of denominational credits or monetary value available to a patron for wagering.

8. "Debit instrument" means a card, code or other device with which a person may initiate an electronic funds transfer or a wagering account transfer.

9. "Duplicate voucher" means any reprinted complete or incomplete voucher.

10. "Electronic funds transfer" means a transfer of funds from an independent financial institution to a gaming device through a cashless wagering system.

11. "Inappropriate coin-in" is a legal coin or token of the correct denomination which has been accepted by a gaming device after the device has already accepted its maximum number of coins or when the device is in a state which normally rejects additional coins.

12. "Incomplete voucher" means a voucher which contains, at a minimum, the voucher validation number printed across the printed leading edge and is manually redeemable, but is not of a quality that can be redeemed through the use of an automated reader or scanner.

13. "Leakage Current" is any electrical current which flows when a conductive path is provided between exposed portions of a gaming device and the environmental electrical ground when the gaming device is isolated from the normal AC power ground.

14. "Non-cashable credits" means the monetary units displayed on a credit meter that have no cash redemption value.

15. "On-line slot system" means, as used in these standards, an on-line slot metering system, a cashless wagering system, or both.

16. "Presentation error" is a condition where a complete or incomplete voucher has been printed, however, the voucher is not presented to the patron for removal.

17. "Print failure" is a condition following the failed attempt to print a complete or incomplete voucher.

18. "Promotional account" means an electronic ledger used in a cashless wagering system to record transactions involving a patron or patrons that are not otherwise recorded in a wagering account.

19. "Random Access Memory" (RAM) is the electronic component used for computer workspace and storage of volatile information in a gaming device. The term does not include memory which is used exclusively for bit-mapped video displays.

20. "Random Number Generator" is a hardware, software, or combination hardware and software device for generating number values that exhibit characteristics of randomness.

21. "Read Only Memory" (ROM) is the electronic component used for storage of non-volatile information in a gaming device. The term includes Programmable ROM and Erasable Programmable ROM.

22. "Replacement voucher" means any voucher that is printed following a failed attempt to print a complete or incomplete voucher.

23. "Slot machine coupon" means a printed wagering instrument that has a fixed dollar wagering value that can only be used to acquire non-cashable credits.

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24. "Slot machine payout receipt" means an instrument that is redeemable for cash and is either issued by a gaming device or as a result of a communication from a gaming device to associated equipment that cannot be accepted by gaming devices for wagering purposes.

25. "Slot machine wagering voucher" means a printed wagering instrument that has a fixed dollar wagering value that can only be used to acquire an equivalent value of cashable credits or cash.

**26. "Socket ID" as used for a system based game means the unique identification assigned to a client station or mobile communications device for accumulating and recording meter and wagering account transfer data associated with a client station or mobile communications device.**

~~26-27.~~ "System Based Game" is a gaming device comprised of a server or system part and client stations that, together, form a single integrated device where the system portion of the game determines the outcomes of the individual games conducted on the client stations and the client stations cannot operate independently from the system. Both the system portion and the clients of the system based gaming device will reside in a single gaming establishment.

~~27-28.~~ "System Supported Game" is a gaming device comprised of a collection of conventional gaming devices or client stations connected to a system for the purpose of downloading control programs and other software resources to the conventional gaming device or client station on an intermittent basis. The system portion as well as the client stations are installed in a single gaming establishment. The client stations connected to the system are capable of operating independently from the system once the downloading process has been completed. This configuration encompasses cases where the system may take control of peripheral devices or associated equipment typically considered part of a conventional gaming device such as a bill validator or a printer. In a system supported game, game outcome is determined by the conventional gaming devices or client stations connected to the system and not by the system itself.

~~28-29.~~ "Tilt condition" is a programmed error state for a gaming device. A tilt condition has occurred when the device detects an internal error, malfunction, or attempted cheating, and it disallows further play until the error is resolved.

~~29-30.~~ "Wagering account" means an electronic ledger for a cashless wagering system patron deposit account wherein only the following types of transactions are recorded:

- (a) Deposits and withdrawals of cash or cash equivalents at a designated area of accountability;
- (b) Deposits initiated with a debit instrument;
- (c) Wagering account transfers to and from gaming devices;
- (d) Wagering account adjustments; and
- (e) Other transactions approved by the chairman.

~~30-31.~~ "Wagering account transfer" means a transfer of funds between a cashless wagering system wagering account and a gaming device.

~~31-32.~~ "Wagering instrument" means, as used in these standards, a representative of value, other than a chip or token, that is issued by a licensee and approved by the board for use in a cashless wagering system and includes slot machine coupons and slot machine wagering vouchers.

(Adopted: 9/89. Amended: 11/20/97; 5/03; 1/1/05, 11/17/05; 7/26/07. Subsection 3 effective as noted.)

## STANDARD 1 INTEGRITY OF DEVICES

### 1.020 Electrical interference immunity.

1. A conventional gaming device or client must exhibit total immunity to human body electrostatic discharges on all player-exposed areas. For purposes of this standard, a human body discharge is considered to be an electrical potential of not greater than 20,000 volts DC discharged through a network with a series resistance of 150 to 1500 ohms shunted by a capacitance of 100 to 150 picofarads. The device must withstand this discharge repeated at one-second intervals. The power source for this human body equivalent is a high-impedance source such that, in effect, the energy available for a given discharge is limited to that contained in the shunt capacitor.

2. A gaming device may exhibit temporary disruption when subjected to electrostatic discharges of 20,000 to 27,000 volts DC through a network with a series resistance of 150 to 1500 ohms shunted by a capacitance of 100 to 150 picofarads, but must exhibit a capacity to recover and complete an interrupted play without loss or corruption of any stored or displayed information and without component failure.

3. Gaming device power supply filtering must be sufficient to prevent disruption of the device by repeated switching on and off of the AC power. The device must not exhibit disruption when a 1 microfarad capacitor, charged to plus or minus 680 volts DC is discharged between the hot and neutral AC supply lines, at any phase from zero to 360 degrees, with a repetition rate of 30 times per second.

4. The random number generator and random selection process must be impervious to influences from outside the device, including, but not limited to, electro-magnetic interference, electro-static interference,

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and radio frequency interference. A gaming device must use appropriate communication protocols to protect the random number generator and random selection process from influence by associated equipment which is conducting data communications with the gaming device.

(Adopted: 9/89. Amended: 11/05; 11/17/05.)

#### **1.030 Coin acceptor and receiver.**

1. Coin (or token) acceptors must be designed to accept designated coins or tokens and reject others. The coin receiver on a gaming device must be designed in a manner that minimizes the potential for use of cheating methods such as slugging, stringing or spooning.

2. Gaming devices which are configured to accept more than 20 coins or tokens for a single play must use a coin acceptor that accepts or rejects on the basis of metal composition of the coin or token unless the denomination of the coin or token is \$.05 or less.

(Adopted: 9/89. Amended: 11/20/97; 7/26/07.)

#### **1.035 Change vouchers or coupons.**

1. A wagering instrument inserted into a gaming device that is less in amount than that gaming device's smallest denomination shall:

(a) Cause that gaming device to immediately reject the wagering instrument if that gaming device does not have an odd cents meter; or

(b) Allow for the additional accumulation of wagering credits if the gaming device has an odd cents meter.

2. A wagering instrument inserted into a gaming device that is greater in amount than that gaming device's smallest denomination and not evenly divisible by any of the gaming device's denominations shall:

(a) Cause that gaming device to immediately issue a change voucher or coupon if that gaming device does not have an odd cents meter and is equipped with a printer mechanism;

(b) Allow for the additional accumulation of wagering credits; or

(c) Cause that gaming device to immediately reject the wagering instrument if that gaming device is not equipped with a printer mechanism or if the printer mechanism is not functioning for any reason.

(Adopted: 5/03. Effective: 2/1/04.)

**1.040 Hoppers.** The hopper mechanism on gaming devices must be designed to detect jammed coins, extra coins paid out, hopper runaways, and hopper empty conditions. The device control program must monitor the hopper mechanism for these error conditions in all active game states that do not indicate error conditions.

(Adopted: 9/89.)

#### **1.045 Printers.**

1. Printer mechanisms on gaming devices must be designed to allow the gaming device to detect low paper, paper out, presentation error, printer failure, and paper jam conditions.

2. Printers must be mounted inside a lockable area of the gaming device.

(Adopted: 5/03. Amended: 1/1/05. Section (1) effective 2/1/04. Section (2) effective 1/1/05.)

#### **1.050 Physical security.**

1. A conventional gaming device must resist forced illegal entry and must retain evidence of any entry until properly cleared or until a new play is initiated. A gaming device must have a protective cover over the circuit boards that contain programs and circuitry used in the random selection process and control of the gaming device, including any electrically alterable program storage media. The cover must be designed to permit installation of a security locking mechanism by the manufacturer or end user of the gaming device.

2. A system supported game must:

(a) For the client portion of the system supported game, comply with Technical Standard 1.050(1).

(b) For the system portion of the system supported game, the server or system component must reside in a secure area where access is limited to authorized personnel. Logical access to the system supported game shall be logged on the server component and remotely on a logging device which resides outside the secure area and is not accessible to the individual accessing the secure area. Logged data shall include: time and date of the access and the identification of the accessing individual(s). The resulting logs shall be retained for a minimum of 90 days.

3. A system based game must:

(a) For the client portion of the system based game, comply with Technical Standard 1.050(1).

(b) For the system portion of the system based game, the server or system component must reside in a secure area where access is limited to authorized personnel. Logical access to the system based game must be logged automatically on the system component of the game and on a computer or other logging device that resides outside the secure area and is not accessible to the individual(s) accessing the secure area. The logged data shall include the time, date, and the identity of the individual accessing the secure area. The resulting logs must be kept for a minimum of 90 days. Additionally, a dedicated video camera

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specifically installed to monitor access to the system based game must record all accesses to the secure area and the resulting video log must be retained for a period of at least 90 days.

(Adopted: 9/89. Amended: 11/20/97; 11/17/05.)

#### **1.060 Communication with associated equipment.**

1. Any gaming device which is capable of bidirectional communication with internal or external associated equipment must utilize a communication protocol which insures that erroneous data or signals will not adversely affect the operation of the device.

2. Any new or modified gaming device submitted for approval which is used with a progressive controller or any other associated equipment that is intended to signal a jackpot hit of any level must provide a complex signal consisting of at least eight logical transitions involving time and magnitude. The device may optionally provide an additional jackpot signal intended for use with older progressive equipment.

3. System supported and system based games may only communicate with equipment or programs external to the system supported or system based game through a secure interface. This interface will specifically not allow any external connection to directly access the internal components, software or data of the system supported or system based gaming device. The interface must:

(a) Be based on a specific defined protocol or a specific set of defined commands and as a result of these commands, retrieve information for an external request;

(b) Place data in an area sufficiently segregated from the system supported or based game software that is available to external requests or associated equipment; or

(c) Be of a suitable design capable of supplying requested information while isolating the external request or equipment from the system supported or system based game internal components, software or data.

(Adopted: 9/89. Amended: 11/17/05.)

#### **1.062 Communication between Client or Conventional Gaming Device and Servers or System Portions of a Gaming Device.**

1. Software transferred between server and client or conventional gaming device portions of a system based or system supported game must be conducted using a method that securely links the client or clients to the server such that the software may only be used by authorized clients. In general, if certificates, keys or seeds are used they must not be hard coded, and must change automatically, over time, as a function of the communication.

2. Information related to player input, game outcome, financial transactions, and game recall information must be encrypted by a means approved by the Chairman.

(Adopted: 11/17/05.)

#### **1.066 Remote access to gaming devices.**

1. Remote access to a gaming device may only be conducted with the server or system portion of a system supported or system based game.

2. A system supported or system based game must be isolated from any remote access connection by at least two different firewalls. At least one of the firewalls must be a hardware implementation.

3. A system supported or system based game may only be accessed using a method that securely links the gaming device to the remote system requesting access. This secure link must uniquely identify the remote system requesting access as an entity authorized to conduct remote communications with the gaming device.

4. A system based or system supported game must provide a hardware or software mechanism that will sever the connection between the gaming device and the remote access terminal. This device must default to and must remain in the disconnected state unless specifically set to allow communications as a result of a command issued by the gaming device. Additionally, upon completion of the communications, the device must again sever the connection between the gaming device and the remote access terminal.

5. A system supported or system based game must log each remote access on the server or system part of the gaming device and on the secondary logging device. The log must include time and date of the access and a list of programs transferred or changed.

6. A system supported or system based game must not enable remote access unless the secondary logging device is operational and is communicating with the gaming device.

7. Software downloaded to a system based or system supported game must be initially stored in a separate area or partition of memory such that the software is sufficiently segregated from the system based or system supported gaming device's operating software as to be unable to affect the operation of the gaming device.

8. Software downloaded to a system supported or system based game must be completely authenticated prior to performing any operation on the software including, but not limited to, decrypting, extracting or uncompressing.

(Adopted: 11/17/05.)

#### **1.070 Error conditions.**

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1. Gaming devices must detect and display the following conditions during idle states or game play. These conditions may be automatically cleared by the gaming device upon completion of a new play sequence.

- (a) Power reset.
- (b) Door open.
- (c) Door just closed.
- (d) Inappropriate coin-in if the inappropriate coin(s) in are not returned to the player.

2. Gaming devices must be capable of detecting and displaying the following error conditions which must disable game play and may only be cleared by an attendant:

- (a) Coin-in error (coin jam, reverse coin-in, etc.).
- (b) Coin-out error (coin jam, extra coin paid out, etc.).
- (c) Hopper empty or timed-out (Hopper failed to make payment).
- (d) Hopper runaway.
- (e) Low RAM battery (a designated battery replacement schedule may be used in lieu of a low battery detection scheme).
- (f) Print failure, if the gaming device has no other means to make a payout. A replacement voucher may be printed once the failure condition has been cleared.
- (g) **[Effective 2/1/04]** Printer mechanism paper jam. A paper jam condition must be monitored at all times during the print process.
- (h) **[Effective 2/1/04]** Printer mechanism paper out, if the gaming device has no other means to make a payout.
- (i) Program error (Defective program storage media).
- (j) Reel spin error of any type including a mis-index condition for mechanical reels. The specific reel number must be identified. If a tilt occurs while the reel(s) are spinning the gaming device must spin the reel(s) at a slow speed.

- (k) Removal of control program storage media.
- (l) Uncorrectable RAM error (RAM defective or corrupted).

3. Gaming devices must be capable of detecting and displaying the following error conditions which must be cleared by an attendant. Game play may continue if an alternative method is available to complete the transaction or the condition does not prohibit the transaction from being completed.

- (a) Hopper empty or timed-out (Hopper failed to make payment).
- (b) **[Effective 2/1/04]** Printer mechanism low paper.
- (c) Presentation error.
- (d) Print failure.
- (e) Printer mechanism paper out.

4. A description of device error codes and their meanings must be affixed inside the gaming device unless the displayed device error codes are self-explanatory.

(Adopted: 9/89. Amended: 5/03; 1/1/05. Effective: 9/89 except (2)(g), (2)(h) and (3)(b) as noted.)

#### **1.080 Control program requirements.**

1. All gaming devices which have control programs residing in one or more Conventional ROM Devices must employ a mechanism approved by the chairman to verify control programs and data. The mechanism used must detect at least 99.99 percent of all possible media failures. If these programs and data are to operate out of volatile RAM, the program that loads the RAM must reside on and operate from a Conventional ROM Device.

2. All gaming devices having control programs or data stored on memory devices other than Conventional ROM Devices must:

(a) Employ a mechanism approved by the chairman which verifies that all control program components, including data and graphic information, are authentic copies of the approved components. The chairman may require tests to verify that components used by Nevada licensees are approved components. The verification mechanism must have an error rate of less than 1 in 10 to the 38th power and must prevent the execution of any control program component if any component is determined to be invalid. Any program component of the verification or initialization mechanism must be stored on a Conventional ROM Device that must be capable of being authenticated using a method approved by the chairman.

(b) Employ a mechanism approved by the chairman which tests unused or unallocated areas of any alterable media for unintended programs or data and tests the structure of the storage media for integrity. The mechanism must prevent further play of the gaming device if unexpected data or structural inconsistencies are found.

(c) Provide a mechanism for keeping a record, in a form approved by the chairman, anytime a control program component is added, removed, or altered on any alterable media. The record must contain a minimum of the last 10 modifications to the media and each record must contain the date and time of the action, identification of the component affected, the reason for the modification and any pertinent validation information.

(d) Provide, as a minimum, a two-stage mechanism for validating all program components on demand via a communication port and protocol approved by the chairman. The first stage of this mechanism must verify all control components. The second stage must be capable of completely authenticating all program

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components, including graphics and data components in a maximum of 20 minutes. The mechanism for extracting the authentication information must be stored on a Conventional ROM Device that must be capable of being authenticated by a method approved by the chairman.

(e) If approved before July 1, 2004, receive a waiver from the chairman for any modification to the device if the full implementation of this section can not be met. The chairman may waive portions of this section if the manufacturer can demonstrate to the chairman's satisfaction that the imposition of the full standard would hinder the design of the device or pose a hardship due to limitations in the approved platform.

3. Any gaming device executing control programs from electrically erasable or volatile memory must employ a mechanism approved by the chairman that ensures the integrity of all control program components residing therein, including fixed data and graphic information and ensures that they are authentic copies of the approved components. Additionally, control program components, excluding graphics and sound components, must be fully verified at the time of loading into the electrically erasable or volatile memory and upon any significant event, including but not limited to game resets and power up. The mechanism must prevent further play of the gaming device if an invalid component is detected.

4. Unless otherwise approved by the chairman, any gaming device that allows the adding, removing, or alteration of any control program components through a data communication facility must employ a mechanism for:

(a) Preventing any change from taking place that would interrupt a game in progress or a game session; and

(b) Storing program changes including changes in graphics and sound information in a non-volatile device that may be verified using such means as prescribed by the chairman.

Any device, technique or network which may be used to accomplish the adding, removing, or alteration of any control program components may, at the chairman's discretion, be considered a gaming device that must receive separate commission approval.

5. Gaming devices with control programs or other security programs residing in conventional Read Only Memory (ROM) devices such as EPROM's or fusible-link PROM's must have the unused portions of the memory device that contains the program set to zero.

6. Gaming device control programs must check for any corruption of random access memory locations used for crucial gaming device functions including, but not limited to, information pertaining to the play and final outcome of the most recent game, the nine games prior to the most recent game, random number generator outcome, credits available for play, and any error states. These memory areas must be checked for corruption following game initiation but prior to display of the game outcome to the player. Detection of any corruption that cannot be corrected shall be deemed to be a game malfunction and must result in a tilt condition.

7. All gaming devices must have the capacity to display a complete play history for the most recent game played and nine games prior to the most recent game. Retention of play history for additional prior games is encouraged. The display must indicate the game outcome (or a representative equivalent), intermediate play steps (such as a hold and draw sequence or a double-down sequence), credits available, bets placed, credits or coins paid, and credits cashed out. Gaming devices offering games with a variable number of intermediate play steps per game may satisfy this requirement by providing the capability to display the last 50 play steps.

8. **[Effective 2/1/04]** All gaming devices must have the capacity to display a complete transaction history for the most recent transaction with a cashless wagering system, and the previous thirty-four transactions prior to the most recent transaction, that incremented any of the in-meters set forth in Technical Standard 2.040(1)(i) through (s) and that incremented any of the out-meters set forth in Technical Standard 2.040(1)(i) through (s). Retention of transaction history for additional prior transactions is encouraged.

(Adopted: 9/89. Amended: 11/20/97; 5/03; 1/1/05; 11/17/05. Effective: 11/20/97 except (8) as noted.)

#### **1.084 Control Program Requirements for System Supported Games.**

1. Conventional gaming devices or clients that are considered part of a system supported gaming device containing control programs must comply with the requirements of Technical Standard 1.080.

2. Systems must be capable of verifying that all control programs contained on the server or system portion are authentic copies of approved components both automatically at least once every 24 hours and on demand. The method of validation must provide at least 128 bits of resolution or must be a bit-for-bit comparison and must prevent the execution of any control program component if the component is determined to be invalid. If an error(s) is detected, the system must provide a visual notification of the invalid program. Any program component of the verification mechanism must reside on and securely load from non-alterable media. A report shall be available which details the outcome of each automated execution of the validation mechanism and shall identify any invalid program components.

3. System supported games must provide for a secondary verification method based on a user input seed of at least 32 bits. The verification method will return a verification result of at least 32 bits corresponding to the control programs currently installed in the system or server portion of the device.

4. System supported games shall be configured such that the system administrator level access may not be achieved without the presence and participation of at least two individuals. This may include split passwords, dual keys or any other suitable method approved by the chairman.

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5. System supported games must provide a log entry anytime an individual causes a software component to be added, removed or altered in the server or system portion of the device. Each log entry must contain the date and time of the action, identification of the component affected, the identification of the individual performing the modification, the reason for the modification and any pertinent validation information. This log must be maintained on the server or system portion of the device as well as on a computer or other logging device not accessible to the individual making the program modification that resides outside the secure area where the server or system component of the device resides. The record of the control program changes must be maintained for at least 90 days.

6. A log entry must be made on the conventional gaming device or client, on the server or system portion of the device and on a computer or other logging device residing outside of the secure area that houses the system supported game anytime a change is made to the software, to include control programs, data, graphics or sound information, in a connected conventional gaming device or client. Each log entry must contain the date and time of the action, identification of the component affected, the reason for the modification, and any pertinent validation information. This information must be retained on the server or system portion of the game and on the secondary logging device for a minimum of 90 days. The conventional gaming device or client station must retain the listed information for at least 100 downloads.

7. Conventional gaming devices or clients that form a part of a system supported game must employ a mechanism that ensures that software downloaded to the conventional gaming device or client from the server or system portion of the system supported game is authentic and is received completely and without modification.

8. The server or system portion of a system supported game must validate any software downloaded to a connected conventional gaming device or client. The validation information must support a resolution of at least 128 bits. The system supported game must support a command(s) that causes any conventional gaming device or client to validate any software downloaded from the server or system portion of the gaming device and must be able to disable the conventional gaming device or client if the validation response is incorrect. Additionally, if the validation response is not correct, a suitable tilt message must be displayed on the conventional gaming device or client station and a notification must be displayed on the server portion of the system supported game.

9. A system supported game must not alter any component of the system or server portion or the conventional gaming device or client portion of the device that would interrupt, or affect the function or operating parameters of a game in progress on any conventional gaming device or client station.

10. If a system supported game downloads software components to a conventional gaming device or client station, the downloaded software must be completely authenticated prior to performing any operation on the software including, but not limited to, decrypting, extracting or uncompressing. The downloaded software may not be applied or made available for play until such time as the conventional gaming device or client has met the conditions for changing the active software.

11. A system supported game must provide a secure interface port through which the software on the system portion of the game may be authenticated and validated.

12. A system supported game must have the capacity to display a complete game play history for the most recent game and at the least 9 games prior to the most recent for each conventional gaming device or client station. The display of the play history for each individual client station or conventional gaming device must be available at the particular client station or conventional gaming device. The display must indicate the game outcome, intermediate play steps (such as a hold/draw sequence or individual bonus game choices), credits available, bets placed, credits or coins paid, and credits cashed out. Gaming devices offering games with a variable number of intermediate play steps per game may satisfy this requirement by providing the capability to display the last 50 play steps. The requirement to display game recall applies to all game programs currently installed on the conventional gaming device or client station.

(Adopted: 11/17/05.)

#### **1.086 Control Program Requirements for System Based Games.**

1. Conventional games or clients that are considered part of a system based game containing control programs must comply with the requirements of Technical Standard 1.080.

2. System based games must be capable of verifying that all control programs contained on the server or system portion are authentic copies of approved components of the gaming device both automatically, at least once every 24 hours, and on demand. The method of validation must provide at least 128 bits of resolution or must be a bit-for-bit comparison and must prevent the execution of any control program component if the component is determined to be invalid and provide a visual notification of the invalid program. Any program component of the verification mechanism must reside on and securely load from non-alterable storage media. A report shall be available which details the outcome of each automated execution of the validation mechanism and shall identify any program components determined to be invalid.

3. System based games must provide for a secondary verification method based on a user input seed of at least 32 bits. The verification method will return a verification result of at least 32 bits corresponding to the control programs currently installed in the system or server portion of the device as well as the client or conventional portion of the gaming device.

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4. System based games shall be configured such that system administrator level access may not be achieved without the presence and participation of at least two individuals. This may include split passwords, dual keys or any other suitable method approved by the chairman.

5. System based games must provide a log entry anytime an individual causes a software component to be added, removed or altered in the server or system portion of the device. Each log entry must contain the date and time of the action, identification of the component affected, identification of the individual performing the modification, the reason for the modification and any pertinent validation information. This log must be maintained on the server or system portion of the device as well as on a computer or other logging device, not accessible to the individual making the program modification, that resides outside the secure area where the server or system component of the device resides. The record of the control program changes must be maintained for at least 90 days.

6. System based games must provide a log entry on the server or system portion of the device and on a computer or other logging device residing outside of the secure area that houses the server or system portion of the device anytime the server or system portion of the game causes a change in the software to include control programs, data, graphics or sound information in the connected conventional gaming device or client. The record must contain the date and time of the action, identification of the component affected, the reason for the modification, and any pertinent validation information, and must be maintained for a minimum of 90 days.

7. Conventional gaming devices or clients that form a part of a system based game must employ a mechanism that ensures that any software downloaded to the conventional gaming device or client from the server or system portion of the system based game is authentic, and is received completely and without modification.

8. The server or system portion of a system based game must validate any software downloaded to a connected conventional gaming device or client. The validation information must support a minimum resolution of at least 128 bits. The system based game must support a command(s) that causes any conventional gaming device or client to validate any software downloaded from the server or system portion of the gaming device and must be able to disable the conventional gaming device or client if the validation response is incorrect. Additionally, if the validation response is not correct a suitable tilt message must be displayed on the conventional gaming device or client station and a notification must be displayed on the server portion of the system based game.

9. System based games must have the capacity to display a complete play history for the most recent game played and at least 34 games prior to the most recent game for each client station connected to the system based game. The display must indicate the game outcome (or a representative equivalent), intermediate play steps (such as hold and draw sequence or a double-down sequence), credits available, bets placed, credits or coins paid, and credits cashed out. Gaming devices offering games with a variable number of intermediate play steps per game may satisfy this requirement by providing the capability to display the last 50 play steps. The capability to initiate game recall must be available at the client for recall of information specifically associated with the particular client station initiating the game recall. The capacity to initiate game recall for any and all clients that make up the system based game must be available from the system or server portion of the system based gaming device. The requirement to display game recall applies to all game programs currently installed on the server portion of the system based game.

10. All system based games must have the capacity to display a complete transaction history for transactions with a cashless wagering system to include the most recent and the previous thirty-four transactions prior to the most recent transaction for each client station and the previous 99 transactions for the overall gaming device, that incremented any of the in-meters set forth in Technical Standard 2.040(1) (i) through (s) and that incremented any of the out-meters set forth in Technical Standard 2.040(1) (i) through (s). The capability to initiate transaction history must be available at the client or conventional gaming device for the transaction history specifically associated with the particular client station initiating the history information request. The capacity to initiate a display of a transaction history for any and all clients or conventional gaming devices that make up the system based game must be available from the system or server portion of the system based game.

11. A system based game must not alter any component of the system or server portion or the conventional gaming device or client portion of the device that would interrupt, or affect the function or operating parameters of a game in progress at any conventional gaming device or client station.

12. If a system based game downloads software components to a conventional gaming device or client station, the downloaded software must be authenticated immediately upon receipt by the conventional gaming device or client station. The downloaded software may not be applied or made available for play until such time as the conventional gaming device or client has successfully authenticated the downloaded software, and has met the conditions for changing the active software.

13. A system based game must provide a secure interface port through which the software on the system and client portions of the game may be authenticated and validated.

(Adopted: 11/17/05.)

**1.090 Bonus or Extended Game Features.** All gaming devices which offer a bonus game or extended feature which requires player selection or interaction are prohibited from automatically making selections

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or initiating games or features unless the gaming device meets the requirements of (1) or (2) and explains the mechanism for auto-initiation or selection on the device glass or video display.

1. The patron is presented with a choice and specifically acknowledges his intent to have the gaming device auto-initiate the bonus or extended play feature by means of a button press or other physical/machine interaction.

2. The bonus or extended feature provides only one choice to the patron i.e., press button to spin wheel. In this case, the device may auto initiate the bonus or extended feature after a time out period of at least 2 minutes.

(Adopted: 12/04. Effective: 1/1/05.)

#### **1.100 Reel strips.**

1. Given a physical reel strip of length L units containing N physical stops, each blank space must occupy a minimum of  $(L/N)*0.4$  units. These blank symbols must be completely free of any portion of any adjacent symbol.

2. All non-blank and blank symbols must be centered in their respective space allocation.

(Adopted: 12/04. Effective: 1/1/05.)

#### **1.110 Safety.**

1. A gaming device must not present a mechanical, electrical or fire hazard when used in its intended mode of operation.

2. The power supply used in a gaming device must be designed to minimize leakage current in the event of intentional or inadvertent disconnection of the AC power ground. Leakage currents of greater than 1.0 milliamperes may be considered hazardous. The power supply must be appropriately fused or protected by circuit breakers.

(Adopted: 9/89. Amended: 1/1/05.)

#### **1.120 System Based Game Configuration.**

1. A system based game, with more than 64 client stations, must be configured such that a failure of any single part or piece of equipment or a failure of the system based game's automated software validation will not result in a cessation of operation of the system based game.

2. A system based game, with more than 64 client stations, must be configured such that a failure of any single part or piece of equipment will not result in more than 50% of the associated client stations being disabled.

3. A system based game must be configured such that a failure of any single part or piece of equipment will not result in any stored information regarding game recall, cashless wagering transaction history, or game performance and accounting being lost or destroyed.

4. A client must be rendered unplayable if communications from the server or system portion of the gaming device is lost. However, in the case of clients that have lost communications with the server, the client must provide a means, such as a hand pay, for patrons to cash out credits indicated on the system based gaming device at the time the communications was lost.

(Adopted: 11/17/05.)

#### **1.130 Requirements for downloading software to a conventional gaming device or client station from a system supported game.**

1. Prior to any software being added or removed from a conventional gaming device or client station comprising a part of a system supported game that would result in the loss of accounting meter information, a complete set of meter information to include all meters required by Technical Standard 2.040 must be successfully communicated to a slot accounting system.

2. Software may not be added onto or removed from a conventional gaming device or client station if an error or tilt condition exists on the conventional gaming device or client station.

(Adopted: 11/17/05.)

#### **1.135 Requirements for downloading software to a conventional gaming device or client station from a system based game.**

1. Prior to any software being added or removed from a system based game that would result in the loss of accounting meter information, a complete set of meter information to include all the meters required by Technical Standard 2.040 for all the client stations as well as the system must be successfully communicated to a slot accounting system.

2. Software may not be removed from a system based game if the particular software being removed is being served to a client station that is in an error or tilt condition.

(Adopted: 11/17/05.)

#### **1.140 Conditions for changing active software on a conventional gaming device or client station that is part of a system supported or system based game.**

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1. Active software consists of all the games currently available for immediate play by the patron on the conventional gaming device or client station. For this section, immediate play means games that do not require additional software or a change in game configuration such as denomination, maximum wager, payback percentage, etc. prior to the patron being able to initiate play.

2. The conventional gaming device or client station must be in the idle mode with no errors or tilts, no play and no credits on the machine for at least 4 minutes. After this time, the conventional gaming device or client station must be disabled and rendered unplayable for at least 4 minutes. During the time the machine is disabled a message must be displayed on a video screen or other appropriate display device notifying the patron that the game configuration has been changed.

3. If the change in the active software is the direct result of a player request, the delay requirements of section 2 of this technical standard may be ignored. However, the active software may not be changed if an error or tilt exists on the conventional gaming device or client station.

#### STANDARD 2

#### PROPER ACCOUNTING FOR GAMING DEVICES

##### **2.010 Changes to payout percentage.**

1. The theoretical payback percentage of a gaming device must not be capable of being changed without making a hardware or software change in the device except as provided for in Technical Standard 1. For purposes of this standard, the addition of an attendant-paid bonus, a progressive jackpot, or a change in rate of progression of an existing progressive jackpot is not considered to be a change in the theoretical payback of the gaming device.

2. Notwithstanding subsection 1, draw poker type gaming devices may have switch selectable or menu selectable top award values so long as the selectable range does not alter the payback percentage of the device by more than 1 percent with typical field play.

(Adopted: 9/89. Amended: 11/17/05.)

**2.020 Accounting of inappropriate coin-ins.** Inappropriate coins-in must be returned to the player by activation of the hopper or credited toward the next play of the gaming device. The gaming device control program must be capable of handling rapidly fed coins so that the occurrences of inappropriate coins-in are minimized.

(Adopted: 9/89.)

##### **2.030 Payouts from the hopper.**

1. All coins or tokens paid from the hopper mechanism must be properly accounted for by the gaming device, including those paid as extra coins during a hopper malfunction.

2. Hopper pay limits must be designed to permit compliance by gaming establishments with published IRS Regulations.

(Adopted: 9/89.)

##### **2.040 Meters for conventional gaming devices, system supported and system based games.**

1. All gaming devices must be equipped with electronic digital storage meters of at least 10 digits capable of displaying the information listed in this section on demand. These meters, listed below, must accumulate the following information in units equal to the denomination of the device or in dollars and cents. Devices configured for multi-denomination play must display the required information in dollars and cents.

(a) Coin In. The machine must have a meter specifically labeled "Coin In" that accumulates the total value of all wagers, whether the wagered amount results from the insertion of coins, tokens, currency, deduction from a credit meter or any other means. This meter shall:

(1) Not include subsequent wagers of intermediate winnings accumulated during game play sequence such as those acquired from "double up" games;

(2) For multi-game and multi-denomination/multi-game gaming devices, provide the information necessary, on a per payable basis, to calculate a weighted average theoretical payback percentage; and

(3) For gaming devices which are considered slot machines and which contain paytables with a difference in the theoretical payback percentage which exceeds 4 percent between wager categories, maintain and display coin in meters and the associated theoretical payback percentage, for each wager category with a different theoretical payback percentage, and calculate a weighted average theoretical payback percentage for that payable;

(b) Coin Out. The machine must have a meter specifically labeled "Coin Out" that accumulates the total value of all amounts directly paid by the machine as a result of winning wagers, whether the payout is made from the hopper, to a credit meter or by any other means. This meter will not record amounts awarded as the result of an external bonusing system or a progressive payout;

(c) Coin Drop. The machine must have a meter specifically labeled "Coin Drop" that accumulates the total value of coins or tokens diverted to the drop;

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(d) Attendant Paid Jackpots. The machine must have a meter specifically labeled "Attendant Paid Jackpots" that accumulates the total value of credits paid by an attendant resulting from a single winning alignment or combination, the amount of which is not capable of being paid by the machine itself. This does not include progressive amounts or amounts awarded as a result of an external bonusing system. This meter is only to include awards resulting from a specifically identified amount listed in the manufacturer's par sheet;

(e) Attendant Paid Cancelled Credits. The machine must have a meter specifically labeled "Attendant Paid Cancelled Credits" that accumulates the total value paid by an attendant resulting from a player initiated cash-out that exceeds the physical or configured capability of the machine to make the proper payout amount;

(f) Physical Coin In. The machine must have a meter specifically labeled "Physical Coin In" that accumulates the total value of coins or tokens inserted into the machine;

(g) Physical Coin Out. The machine must have a meter specifically labeled "Physical Coin Out" that accumulates the value of all coins or tokens physically paid by the machine;

(h) Bill In. The machine must have a meter specifically labeled "Bill In" that accumulates the total value of currency accepted. Additionally, the machine must have a specific meter for each denomination of currency accepted that records the number of bills accepted of each denomination;

(i) Voucher In. The machine must have a meter specifically labeled "Voucher In" that accumulates the total value of all slot machine wagering vouchers accepted by the machine;

(j) Voucher Out. The machine must have a meter specifically labeled "Voucher Out" that accumulates the total value of all slot machine wagering vouchers and payout receipts issued by the machine;

(k) Electronic Funds Transfer In (EFT In). The machine must have a meter specifically labeled "EFT In" that accumulates the total value of cashable credits electronically transferred from a financial institution to the machine through a cashless wagering system;

(l) Wagering Account Transfer In (WAT In). The machine must have a meter specifically labeled "WAT In" that accumulates the total value of cashable credits electronically transferred to the machine from a wagering account by means of an external connection between the machine and a cashless wagering system;

(m) Wagering Account Transfer Out (WAT Out). The machine must have a meter specifically labeled "WAT Out" that accumulates the total value of cashable credits electronically transferred from the machine to a wagering account by means of an external connection between the machine and a cashless wagering system;

(n) Non-Cashable Electronic Promotion In. The machine must have a meter specifically labeled "Non-Cashable Electronic Promotion In" that accumulates the total value of non-cashable credits electronically transferred to the machine from a promotional account by means of an external connection between the machine and a cashless wagering system;

(o) Cashable Electronic Promotion In. The machine must have a meter specifically labeled "Cashable Electronic Promotion In" that accumulates the total value of cashable credits electronically transferred to the machine from a promotional account by means of an external connection between the machine and a cashless wagering system;

(p) Non-Cashable Electronic Promotion Out. The machine must have a meter specifically labeled "Non-Cashable Electronic Promotion Out" that accumulates the total value of non-cashable credits electronically transferred from the machine to a promotional account by means of an external connection between the machine and a cashless wagering system;

(q) Cashable Electronic Promotion Out. The machine must have a meter specifically labeled "Cashable Electronic Promotion Out" that accumulates the total value of cashable credits electronically transferred from the machine to a promotional account by means of an external connection between the machine and a cashless wagering system;

(r) Coupon Promotion In. The machine must have a meter specifically labeled "Coupon Promotion In" that accumulates the total value of all slot machine coupons accepted by the machine;

(s) Coupon Promotion Out. The machine must have a meter specifically labeled "Coupon Promotion Out" that accumulates the total value of all slot machine coupons issued by the machine;

(t) Machine Paid External Bonus Payout. The machine must have a meter specifically labeled "Machine Paid External Bonus Payout" that accumulates the total value of additional amounts awarded as a result of an external bonusing system and paid by the slot machine;

(u) Attendant Paid External Bonus Payout. The machine must have a meter specifically labeled "Attendant Paid External Bonus Payout" that accumulates the total value of amounts awarded as a result of an external bonusing system paid by an attendant;

(v) Attendant Paid Progressive Payout. The machine must have a meter specifically labeled "Attendant Paid Progressive Payout" that accumulates the total value of credits paid by an attendant as a result of progressive awards that are not capable of being paid by the machine itself;

(w) Machine Paid Progressive Payout. The machine must have a meter specifically labeled "Machine Paid Progressive Payout" that accumulates the total value of credits paid as a result of progressive awards paid directly by the machine. This meter does not include awards paid as a result of an external bonusing system; and

(x) Such other meters as may be required by the chairman.

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2. Gaming devices that are unable to comply with the full requirements of Technical Standard 2.040(1) shall:

(a) For gaming devices that are unable to display the specific meter labels required, use a legend to indicate what information a specific meter accumulates.

(b) For gaming devices that are unable to incorporate meters (i) through (w) due to undue hardship on the gaming device manufacturer, not be required to incorporate such meters if this requirement is waived by the chairman.

3. All gaming devices must be equipped with a device, mechanism or method which retains the value of all the required meters in 2.040(1) in the event of power loss to the device.

4. Gaming devices must have electronically stored meters of at least 8 digits that record the number of games played:

(a) Since power reset;

(b) Since door close; and

(c) Since game initialization (RAM clear).

The gaming device must provide the means for on-demand display of the stored information.

5. Unless a tilt condition or other malfunction exists, gaming devices must have meters in units equal to the denomination of the current game selection, in dollars and cents or in other units approved by the chairman, continuously displaying to a player the following information as it pertains to the current play or monetary transaction:

(a) The coins or credits wagered;

(b) The coins or credits won, if applicable;

(c) The coins paid by the hopper for a credit cash-out or a direct pay from a winning outcome; and

(d) The credits available for wagering, if applicable.

6. Electronically stored meter information required by this section must be preserved for a minimum of 72 hours after a power loss to the gaming device.

(Adopted: 9/89. Amended: 11/20/97; 5/03; 1/1/05. Effective: 2/1/04.)

#### **2.045 Meters for system based games.**

1. Client stations must be able to display meters complying with the requirements of Regulation 2.040 that correspond to the play associated with the particular client station available, on demand, at each client station.

2. System portions of system based games must store, must be able to display and must be able to send to a slot accounting system, meter information that complies with the requirements of Regulation 2.040 that are associated with the play of each individual client station as well as for the system based game in its entirety.

(Adopted:11/17/05.)

#### **2.050 Credit play requirements.**

1. Cashable credits may be accumulated from wins, approved currency acceptors, electronic funds transfers, wagering account transfers, or any other transfers of cashable credits. Cashable credits may be accumulated directly from coin or token acceptance if the gaming device uses a coin/token acceptor that accepts or rejects on the basis of the metallic composition of the coins being used.

2. Wagering credits available for play must be wagered in the following order:

(a) Non-cashable credits;

(b) Cashable credits given away by a licensee; and

(c) All other credits.

(Adopted: 9/89. Amended: 11/20/97; 5/03; 7/26/07. Effective: 2/1/04.)

**2.060 Award cards.** Award cards must be clearly identified and must be displayed at all times the device is available for play or be readily available for display on the device on demand by the player. Award cards must accurately state the award that will be paid through any combination of dispensed coin, credit awards, printed tickets, attendant pays, or electronic funds transfer when the player obtains a specific win. The award card must clearly indicate whether awards are designated in denominational units, dollars and cents, or some other unit. All award cards present on a gaming device must reflect any change in award value which may occur in the course of play.

(Adopted: 9/89. Amended: 11/20/97.)

**2.070 Jackpot Odds.** If the odds of hitting any advertised jackpot that is offered by a gaming device exceeds 100 million to one, the odds of the advertised jackpot must be prominently displayed on the award glass or video display.

(Adopted: 12/04. Effective 1/1/05.)

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*INTEGRITY OF AND PROPER ACCOUNTING*  
*FOR ON-LINE SLOT SYSTEMS*

**3.010 Communication security.** The on-line slot system shall include secured communication as follows:

1. All communications that initiate a gaming device pay command shall employ some form of encryption that has been approved by the chairman.
2. All data communication shall incorporate an error detection and correction scheme approved by the Chairman to ensure the data is transmitted and received accurately.  
(Adopted: 5/03. Effective: 8/22/04.)

**3.020 Error conditions.** The on-line slot system shall be capable of detecting and displaying certain conditions. These conditions shall be recorded on an error log that may be displayed or printed on demand, and shall archive the conditions for a minimum of thirty days. The conditions include but are not limited to:

1. Power reset or failure of a gaming device or any component of the on-line slot system.
2. Communication loss between a gaming device and any component of the on-line slot system.  
(Adopted: 5/03. Effective: 8/22/04.)

**3.030 Program access control.** The on-line slot system shall be capable of restricting or limiting access to any and all program components by a method approved by the chairman.  
(Adopted: 5/03. Effective: 8/22/04.)

**3.040 Data access control.**

1. The on-line slot system shall not permit the alteration of any system stored accounting or event log information that was properly communicated from the gaming device unless documented, secure access controls are provided.

2. Cashless wagering systems must employ a method that has been approved by the chairman that renders all critical cashless wagering system stored data non-alterable. Critical cashless wagering system data includes data relating to, but is not limited to, slot machine coupons and slot machine wagering voucher validation numbers and instrument value, promotional account and wagering account personal identification numbers and account balances.

3. On-line slot systems may only communicate with equipment or programs external to the system through a secure interface. This interface will specifically not allow any external connection to directly access the alterable data of the system. The interface must:

(a) Be based on a specific defined protocol or a specific set of defined commands and as a result of these commands, retrieve information for an external request; or

(b) Place redundant data in an area sufficiently segregated from the associated software that is available to external requests or associated equipment; or

(c) Be of a suitable design capable of supplying requested information while isolating the external request or equipment from the system data.

(Adopted: 5/03. Effective: 8/22/04.)

**3.050 On-line system clock.**

1. The on-line slot system shall maintain an internal clock that accurately reflects the current time (in hours, minutes and seconds) and date that shall be used to provide for the following:

- (a) Time stamping of significant events;
- (b) Reference clock for reporting; and
- (c) Time stamping of configuration changes.

2. If multiple clocks are used, then a means shall be provided that will update all clocks in devices attached to the system, including the gaming devices, at least once in each 24-hour period.

(Adopted: 5/03. Effective: 8/22/04.)

**3.060 On-line slot system integrity.**

1. The on-line slot system shall be designed so that no single failure of any system component will cause the cessation of system operation. Alternatively, each gaming establishment must provide for back-up components or systems using a plan approved by the chairman.

2. The database shall be stored on redundant media so that no single failure of any portion of the system would cause the loss or corruption of data.

(Adopted: 5/03. Effective: 8/22/04.)

**3.070 Interface with gaming device.**

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1. Each gaming device interfaced with an on-line slot system using an interface component shall have the interface component either installed inside a secure area of the gaming device or shall employ a secure communication method between the gaming device and the interface component.

2. The interface component shall send information to the on-line slot system via a communication protocol approved by the chairman.

3. A system shall be designed such that communications that access gaming device components, including but not limited to, bill validators, hoppers and printers, may only access those components through a processor that has been approved using the standards and criteria for a gaming device.

(Adopted: 5/03. Effective: 8/22/04.)

**3.080 Clearing meters.** An interface component shall have a mechanism whereby an error will not cause the loss of stored accounting meter information.

(Adopted: 5/03. Effective: 8/22/04.)

**3.090 Meter backup requirements.** Data recorded by electronic meters shall be preserved after a power loss to an interface component and shall be maintained for a period of at least seventy-two (72) hours.

(Adopted: 5/03. Effective: 8/22/04.)

**3.100 Address requirements.** Interface components shall allow for the configuration of a unique identification number to be used in conjunction with the gaming device file in the on-line slot system. This identification number will be used by the on-line slot system to track all mandatory information of the associated gaming device.

(Adopted: 5/03. Effective: 8/22/04.)

**3.110 Required meters.** The on-line slot metering system shall be equipped to read specific values of or store the information accumulated by the electronic digital storage meters in the gaming device. The following meter information is stored in units equal to the denomination of the device or in dollars and cents:

1. Coin in.
2. Coin out.
3. Coin drop.
4. Attendant paid jackpots.
5. Attendant paid cancelled credits.
6. Physical coin in.
7. Physical coin out.
8. Bill in.
9. Voucher out (for the metering of payout receipts).
10. Machine paid external bonus payout.
11. Attendant paid external bonus payout.
12. Attendant paid progressive payout.
13. Machine paid progressive payout.

Note 1: System meters shall be referred to with the above terms and shall accumulate the information as required by Technical Standard 2.040.

Note 2: The system shall maintain payable coin-in and theoretical payback percentage information provided by the gaming device for each multi-game or multi-denomination/multi-game slot machine.

Note 3: The system shall maintain payable coin-in and weighted average theoretical payback percentage information provided by each gaming device which is considered a slot machine and which contains paytables with a difference in theoretical payback percentage which exceeds 4 percent between wager categories.

(Adopted: 5/03. Effective: 8/22/04.)

**3.120 Recording of meter information.** An on-line slot metering system must have a mechanism in place to record all required meters, as specified by Technical Standard 3.110, on demand and at the time a drop box (coin or currency) is removed.

(Adopted: 5/03. Effective: 8/22/04.)

**3.130 Payout receipts.** Systems that issue a printed payout receipt shall:

1. Include on all payout receipts:
  - (a) Licensee name, city and state;
  - (b) Gaming device number;
  - (c) Date and time of issuance;
  - (d) Alpha and numeric dollar amount;
  - (e) Sequence number; and
  - (f) Expiration period or date when receipt will expire, if applicable.
2. Only allow the printing of a payout receipt upon a communication initiated by a

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gaming device.

3. Provide for on-line, real-time validation of payout receipts.

4. Be incapable of authorizing payment on a payout receipt that has been previously paid, voided, or that is unissued.

5. For payout receipts printed at a gaming device, not allow an expiration period of less than thirty days.

(Adopted: 5/03. Effective: 8/22/04.)

**3.140 Documentation required of on-line slot metering systems.** Documentation generated by an on-line slot metering system indicating information by slot machine, by denomination and in total, shall be available on a day, month, year-to-date basis and for at least a previous two-year cumulative basis. The system shall be designed so that documentation may be created daily or on demand and includes, at a minimum:

1. For each document:

(a) Document title;

(b) Version number of the current system software;

(c) Date or time period of activity; and

(d) Date and time the document was generated.

Note: Documents that compare metered amounts to actual amounts shall include a dollar variance and a percentage variance. The percentage variance is the dollar variance divided by the metered amount.

2. Slot machine performance including:

(a) By machine **or socket ID**:

(1) Denomination or an indication that the machine is a multi-denomination machine;

(2) Slot machine number and game type;

(3) Coin in;

(4) Metered or actual drop (system configurable);

(5) Actual jackpot payout slips issued;

(6) Actual fill slips issued;

(7) Win;

(8) Theoretical hold percentage;

(9) Actual hold percentage;

(10) Percentage variance (theoretical hold vs. actual hold); and

(11) Projected dollar variance (i.e., coin in times the percentage variance).

(b) By denomination and in total:

(1) Weighted average theoretical hold (i.e., floor par);

(2) Combined actual hold percentage (all win divided by all coin in);

(3) Percentage variance (floor par vs. combined actual hold percentage); and

(4) Projected dollar variance (i.e., total coin in times the percentage variance).

Note 1: Floor pars are the sum of the theoretical hold percentages of all machines within a denomination weighted by coin in contribution.

Note 2: Drop, fills, jackpot payouts, and win figures may need adjustment to determine the true slot machine performance.

Note 3: The system shall compute accurate theoretical hold percentages, based on coin-in contribution, for each multi-game or multi-denomination/multi-game slot machine.

Note 4: The system shall compute accurate theoretical hold percentages for each gaming device which is considered a slot machine and which contains paytables with a difference in theoretical payback percentage which exceeds 4 percent between wager categories.

3. Meter drop vs. actual drop for each drop type (coin and bills), by machine and in total.

4. Meter attendant paid jackpots, cancelled credits, progressive payouts and external bonus payouts (in total) vs. actual attendant paid jackpots, cancelled credits, progressive payouts and external bonus payouts (in total).

Note: The system must produce a report (by machine and in total) that compares each type of attendant pay for those machines that have variances.

5. Meter fills vs. actual fills.

Note: Meter fills equal "Meter physical coin in" - "Meter physical coin out" - "Meter coin drop".

6. Meter machine paid and attendant paid external bonus payouts vs. external bonusing system machine paid and attendant paid external bonus payouts.

7. Meter voucher out vs. system payout receipts issued.

8. System payout receipts redeemed, by cashiering station, by shift.

9. System payout receipts issued, to include date issued, amount, sequence number and identification of gaming device where issued.

10. System payout receipt liabilities, by date issued and receipt sequence number.

11. Meter win vs. actual taxable win.

Note: "Meter win" equals "meter coin in" (-) "meter coin out" (-) "meter machine paid progressive payout" (-) "meter machine paid external bonus payout" (-) "total of meters accumulating attendant payouts" (excluding attendant paid cancelled credits).

12. Exception report. In the event data or parameters are changed, an exception report shall be produced to document:

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- (a) Data or parameter altered;
- (b) Data or parameter value prior to alteration;
- (c) Data or parameter value after alteration;
- (d) Date and time of alteration; and
- (e) Identification of user that performed alteration.

13. By machine, a report of all required meter amounts read and recorded by the on-line slot system.  
(Adopted: 5/03. Effective: 8/22/04.)

**3.150 Additional requirements for cashless wagering systems.** In addition to those requirements set forth for on-line slot metering systems, and except for those requirements described in Technical Standards 3.110 through 3.140, all cashless wagering systems submitted for approval shall:

1. Prevent the direct wagering at a gaming device or an electronic funds transfer to a gaming device through the use of a credit card.

2. In the event of debit instrument transactions, execute such transactions in accordance with all applicable state and federal electronic funds transfer requirements or wagering account transfer requirements including receipting and fee disclosure requirements. Additionally, for electronic funds transfers, the cashless wagering system must provide for a configurable daily transfer limit which must not exceed \$1,000 per day per debit instrument.

3. Employ some form of data encryption that has been approved by the chairman for all data that is transmitted to or from a gaming device. This standard does not apply to data that is transmitted between a gaming device and a gaming device interface component.

4. Provide a secure method for patron access to wagering accounts and promotional accounts.

5. For all patron initiated transactions, assign to each transaction a unique identifier of at least eight digits that includes the gaming device designation.

6. Be equipped to read and store the specific values indicated on the electronic digital storage meters in the gaming device, as applicable to the system. The following gaming device meter information is stored in units equal to the denomination of the device or in dollars and cents:

- (a) Voucher in.
- (b) Voucher out (for the metering of slot machine wagering vouchers and payout receipts).
- (c) Electronic funds transfer in (EFT In).
- (d) Wagering account transfer in (WAT In).
- (e) Wagering account transfer out (WAT Out).
- (f) Cashable electronic promotion in.
- (g) Cashable electronic promotion out.
- (h) Non-cashable electronic promotion in.
- (i) Non-cashable electronic promotion out.
- (j) Coupon promotion in.
- (k) Coupon promotion out.

Note: System meters shall be referred to with the above terms and shall accumulate applicable system generated information as well as information stored on gaming device meters as required by Technical Standard 2.040.

7. Have a mechanism in place to record all required meters, as specified by Technical Standard 3.150(6), at the time a drop box (coin or currency) is removed and at any time specified by the end user.

8. Prevent an expiration period of less than thirty days for slot machine wagering vouchers.

9. Include on all slot machine wagering vouchers and coupons:

- (a) Licensee name, city and state;
- (b) Gaming device number or printer station number, as applicable;
- (c) Date and time of issuance;
- (d) Alpha and numeric dollar amount;
- (e) Sequence number;
- (f) Validation number;
- (g) Second printing of validation number on the leading edge of the voucher or coupon;
- (h) Unique identifier (e.g., bar code);
- (i) Transaction type or other acceptable method of differentiating ticket types; and
- (j) Expiration period or date when voucher or coupon will expire, if applicable.

10. Cause a relevant, informative message to be displayed whenever any player-initiated wagering account transfer or electronic funds transfer is being processed.

11. In the event communications between the system and a gaming device are lost, allow no more than one wagering instrument to be printed.

12. Require all electronic funds transfers to be recorded by the system.

13. Provide for on-line, real-time validation of wagering instruments or debit instruments, as applicable.

14. Be incapable of authorizing payment on a wagering instrument that has been previously paid, voided, or that is unissued, and the system shall display the status of the instrument.

15. Prevent the removal or erasure of events and transactions from any communication device until that information has been successfully transferred and acknowledged by the communication device next in succession.

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### Proposed Revisions to Technical Standards for MGS, SBG, and SSG

16. Be designed to prevent unauthorized changes to cashless wagering system programs and databases.

17. Require the end user to initiate any remote access and shall only allow remote access by the system's licensed manufacturer from that manufacturer's place of business.

(Adopted: 5/03. Effective: 8/22/04.)

**3.160 Documentation Required of Cashless Wagering Systems.** Documentation generated by a cashless wagering system shall be available on a day, month, year-to-date basis and for at least a previous two-year cumulative basis. The system shall be designed so that documentation may be created daily or on demand and includes, at a minimum:

1. For each document:
  - (a) Document title;
  - (b) Version number of the current system software;
  - (c) Date or time period of activity; and
  - (d) Date and time the document was generated.
2. Wagering instrument issuances by date and identification of gaming device where issued, by gaming device.
3. Wagering instrument redemptions by date and means of redemption (e.g., gaming device, cashier station, kiosk, etc.).
4. Wagering instrument liabilities by date issued and by instrument sequence number.
5. Wagering instruments expired by date issued, sequence number and identification of gaming device where issued.
6. Wagering instruments voided by date issued, instrument sequence number and identification of gaming device where issued.
7. Debit instrument (i.e., wagering account) activity and balances, by patron and gaming device and shall include the date and time of each transfer to or from each gaming device.
8. Vouchers and coupons counted in the count room, by gaming device and by type of instrument.
9. Gaming device meter EFT in vs. system EFT in.
10. Gaming device meter WAT in vs. system WAT in.
11. Gaming device meter WAT out vs. system WAT out.
12. System promotional account activity and balances, by patron or by promotion, as applicable.
13. System wagering account activity (deposits, transfers to and from gaming devices, **WAT Win**, withdrawals, adjustments) and **beginning and ending** balances, by wagering account, **and in total**.
14. Gaming device meter cashable electronic promotion in vs. system cashable electronic promotion in.
15. Gaming device meter cashable electronic promotion out vs. system cashable electronic promotion out.
16. Gaming device meter non-cashable electronic promotion in vs. system non-cashable electronic promotion in.
17. Gaming device meter non-cashable electronic promotion out vs. system non-cashable electronic promotion out.
18. Gaming device meter voucher in vs. system voucher in forms accepted.
19. System voucher in vs. vouchers counted in the count room, by gaming device.
20. Gaming device meter voucher out vs. system voucher out forms issued.
21. Gaming device meter coupon promotion in vs. system coupon promotion in forms accepted.
22. System coupon promotion in vs. coupons counted in the count room, by gaming device.
23. Gaming device meter coupon promotion out vs. system coupon promotion out forms issued.
24. Slot machine performance report, as set forth in Technical Standard 3.140(2), that properly includes the wagering activity recorded on the gaming device meters set forth in Technical Standard 3.150(6), if the cashless wagering system is integrated with an on-line slot metering system.
25. For each individual adjustment made to a cashless wagering account or a promotional account, a summary of the adjustment to include:
  - (a) Patron name and account number, or specific promotion, as applicable;
  - (b) Amount of, and explanation for, the adjustment; and
  - (c) Identification of the user completing and/or authorizing the adjustment.
26. All cashiering activities (e.g., log on, redemptions, deposits/withdrawals and adjustments to wagering accounts, log off, etc.), by cashier.
27. All exceptions to include:
  - (a) Date and time of exception;
  - (b) Gaming device number or user identification number and terminal location where the exception occurred; and
  - (c) A description of the exception or a unique code that identifies the exception.

(Adopted: 5/03. Effective: 8/22/04.)

### **3.161 Documentation Required of System Based Game.**

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1. Documentation generated for a system based game shall be available on a day, month, year-to-date basis and for at least a previous two-year cumulative basis. The system shall be designed so that documentation may be created daily or on demand and includes, at a minimum:

(a) For each document:

(1) Document title;

(2) Version number of the current system software;

(3) Date or time period of activity; and

(4) Date and time the document was generated.

(b) For each WAT In transaction or WAT Out transaction:

(1) Wagering account number;

(2) Socket ID; and

(3) Date and time of transfer.

(c) Revenue report shall include total amount of WAT In, WAT Out and WAT Win by socket ID and grand totals.

(d) Each WAT In transaction and WAT Out transaction by wagering account number; total WAT In, total WAT Out and total WAT Win by wagering account number; and grand totals.

(e) Each WAT In transaction and WAT Out transaction by socket ID; total WAT In, total WAT Out and total WAT Win by socket ID; and grand totals.

2. The system based game shall be designed to display or create documentation on demand which includes the number of socket IDs available to operate mobile communications devices, and the identification of each mobile communications device assigned to a socket ID.

3. All exceptions to include:

(a) Date and time of exception;

(b) Socket ID where the exception occurred; and

(c) A description of the exception or a unique code that identifies the exception.

**3.170 Waiver provisions.** Upon a showing of good cause, the chairman may waive any of the requirements of Technical Standard 3.

(Adopted: 5/03. Effective: 8/22/04.)

#### MOBILE GAMING SYSTEMS

##### **4.010 User Authorization.**

1. Mobile gaming systems must employ a mechanism approved by the chairman which is capable of verifying that the mobile communications device is being operated by an authorized person.

2. The mechanism used to verify that the mobile communications device is being operated by an authorized person must be capable of being initiated both on demand and on a regular basis.

3. Authorization information transmitted by the mobile communications device to the mobile gaming system for identification purposes must be collected at the time of the request from the mobile gaming system and may not be stored on the mobile communications device.

4. The chairman, in his/her sole and absolute discretion, may waive the requirements of this section for mobile communications devices that cannot be reasonably moved by a patron.

(Adopted: 3/06.)

##### **4.020 Mobile Communications Device Communication with a Mobile Gaming System.**

1. Communication between a mobile communications device and a mobile gaming system must be conducted using a method that securely links the mobile communications device to the mobile gaming system and authenticates both the mobile communications device and mobile gaming system as authorized to communicate over that link.

2. Mobile gaming system components which interface mobile communications devices must sufficiently isolate the mobile communications devices from the server portion of the mobile gaming system.

3. A mobile communications device must be designed or programmed such that it may only communicate with authorized mobile gaming systems.

(Adopted: 3/06.)

**4.030 Location Restrictions.** Mobile gaming systems must be designed to restrict the gaming operation of the mobile communications device to public areas as defined by Regulation 5.220.

(Adopted: 3/06.)

**4.040 Mobile Communications Device Volume.** Mobile communications devices must be capable of adjusting and/or muting the volume on the device.

(Adopted: 3/06.)

# Attachment E

## Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

Note: This attachment contains the proposed Minimum Internal Control Standards (MICS) associated with the operation of MGS, SBG and SSG to be considered for adoption. Underlined language denotes additions; strikethrough language denotes deletions

### Introduction

This draft of MICS amendments is primarily intended for use by Group I licensees and licensed manufacturers as a guidance document for the development, implementation, and installation of system based games, system supported games and mobile gaming systems. This guidance will be considered interim Board policy until such time as formal MICS amendments are adopted and effective. During the formal MICS adoption process in 2008, minor changes may be made to these MICS.

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### Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

#### Introduction

This draft of MICS amendments is primarily intended for use by Group I licensees and licensed manufacturers as a guidance document for the development, implementation, and installation of system based games, system supported games and mobile gaming systems. This guidance will be considered interim Board policy until such time as formal MICS amendments are adopted and effective. During the formal MICS adoption process in 2008, minor changes may be made to these MICS.

Note: Underlined language denotes additions; strikethrough language denotes deletions

#### **Slots Minimum Internal Control Standards**

Note 1 - 4: No change related to SSG, SBG and MGS at this time.

Note 5: As used in these MICS, the following terms have the same meanings as delineated in Regulation 5.220, Regulation 14.010 and Regulation 14 Technical Standard 1.010, as applicable:

System based game (“SBG”) [TS1.010(27)]

System supported game (“SSG”) [TS1.010(28)]

Mobile gaming system (“MGS”) [Regulation 5.220]

Mobile communications device (“MCD”) [Regulation 5.220]

Socket ID [TS1.010(26) – Proposed definition]

Wagering account [TS1.010(30)]

Cashless wagering system (“CWS”) [Regulation 14.010(1)]

Note 6: As used in these MICS, any reference to SBG includes a MGS unless MGS is specifically excluded in the MICS. Any reference to slot machines refers to conventional gaming devices and/or those client stations used with SSG unless otherwise specified. When the term “slot machine/socket ID” is used in a MICS, a socket ID related to a SBG is used for compliance purposes.

Note 7: As used in these MICS, the term “TS3 OSMS” means an approved on-line slot metering system that satisfies the requirements of Regulation 14 Technical Standard 3. The term “non TS3 metering system” is used for an approved slot metering system that does not satisfy the requirements of Regulation 14 Technical Standard 3.

Note 8: As used in these MICS, the term “paytable” is used to identify a game and its related payout schedule unless otherwise specified.

Note 9: Electronic fund transfers from a financial institution to a slot machine or a socket ID on a SBG game server are not permitted unless the licensee specifically receives Board approval to have such transfers.

Note 10: As used in these MICS, the term “4% spread payable” means a payable with a difference in theoretical hold percentage exceeding 4 percent for single-coin play versus maximum-coin play (i.e., one coin, two coins, etc.).

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### Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

1. - 90. No change related to SSG, SBG and MGS at this time.

#### **EPROM Game Program Testing**

**Note :** As discussed in Regulation 14 Technical Standard 1.080, a game program is software that is secured from unrestricted access immediately when received from the manufacturer. It also is a game program from a slot machine or game server that has been tested by personnel independent of the slot department and of any other department involved with the operation of SBG or SSG, or outside vendor immediately prior to duplication to ensure that the game program is an unaltered Board-approved program.

91. ~~At least annually,~~ a minimum of one individual who is independent of the slot department, and of any other department involved with the operation of SBG or SSG, or outside vendor;

a. At least annually, tests a sample of slot machine game programs (e.g., game programs stored on ROMs, EPROMs, FLASH ROMs, DVD, CD-ROM, hard drive or Compact Flash), including those stored on the game server of a SBG, to ensure that the ~~EPROMs-~~ game program is an unaltered Board-approved game program ~~have not been tampered with.~~

b. For SSG and SBG, for one day per quarter, reviews a sample of SSG/SBG logs required by Technical Standard 1.084(6) and 1.086(6). The review identifies any changes to the existing game programs provided by the SSG or on the game server of a SBG. Document and maintain the results of the review. All noted improper changes to game programs, improper transactions or unusual occurrences are investigated with the results documented.

#### **EPROM Game Program Duplication**

**Note 1:** The following EPROM duplication MICS only apply to slot machines with game programs stored in EPROMS.

Note ~~4~~2: EPROM duplication may only be performed by a licensed manufacturer or a licensee who has received Board approval to duplicate EPROMs.

Note ~~2~~3: The EPROMs of some manufacturers may be protected by federal copyright laws. The licensee should ensure that all applicable laws are complied with when duplicating EPROMs.

~~Note 3: Equivalent controls must be in place should gaming device program storage media approved by the Board, other than EPROMs, be duplicated.~~

Note 4: A master game program EPROM is an EPROM that is secured from unrestricted access immediately when received from the manufacturer and after being verified to the manufacturer's par sheet. It also could be an EPROM from a slot machine that has been tested by personnel independent of the slot department or outside vendor immediately prior to duplication to ensure that the EPROM is a Board-approved program that has not been tampered with.

92. - 94. No change related to SSG, SBG and MGS at this time.

#### **Other Game Program Storage Media Duplication**

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### Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

Note 1: The following duplication MICS apply to slot machines, gaming devices and SSG/SBG game servers using any storage media other than EPROMS.

Note 2: Game program duplication may only be performed by a licensed manufacturer or a licensee who has received Board approval to duplicate game programs.

Note 3: Game programs of some manufacturers may be protected by federal copyright laws. The licensee should ensure that all applicable laws are complied with when duplicating game programs.

Note 4: It is not considered game program duplication when game programs are transferred from a SSG/SBG game server to client stations.

94.1. Procedures are developed, implemented and delineated within the written system of internal control submitted to the Board for the following:

- a. Copying a game program to the storage media.
- b. Verification of duplicated game program immediately after duplication is complete.
- c. Verification of duplicated game programs on slot machine, gaming device or game server prior to being offered for play.
- d. Securing the game program from unrestricted access.

94.2. Records must be maintained documenting the above procedures. The records must include the following information:

- a. Date.
- b. Manufacturer's name.
- c. Program number.
- d. Personnel involved.
- e. Reason for duplication.
- f. GCB Lab approval number.

#### ***Slot Machine Performance – Slot Machine Records***

95. No change related to SSG, SBG and MGS at this time.
96. Accurate and current theoretical hold worksheets are maintained for each slot machine and game programs on a SBG game server.
97. For slot machines, the master game program number on the EPROM, par percentage associated with the EPROM, and the payable are verified to the par sheet when initially received from the manufacturer.

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### Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

98. No change related to SSG, SBG and MGS at this time.

**~~Slot Machine Performance – Multi-Game and Multi-Game/or Multi-Denomination Slot Machines and Slot Machines with Differences in Theoretical Hold Percentage exceeding a 4% Spread Between the Minimum and Maximum Theoretical Hold~~**

Note 1: MICS #99 and #100 ~~also~~ apply to licensees that have installed:

- ~~an “On-Line Slot Metering System” approved by the Board pursuant to Regulation 14 Technical Standard 3~~ A TS3 OSMS but the multi-game ~~and/or or multi-game/~~multi-denomination slot machines cannot communicate the coin-in amount by payable ~~and/or for 4% spread paytables (usually slot machines approved by the Board prior to 8/1/04); or~~
- A non TS3 metering system or have not installed a metering system.

Note 2: For MICS #99 - #109, “coin-in” has the same meaning as in Regulation 14 Technical Standard 2.040(1)(a).

Note 3: For MICS #99 - #101, the procedures are required even when only one payable is active for a multi-game slot machine.

99. - 100. No change related to SSG, SBG and MGS at this time.

Note 1: For MICS #101 and #101.1, the licensee has installed a TS3 OSMS which automatically obtains the coin-in amount by payable, including paytables by denomination when a payable has a different theoretical hold percentage for each denomination, and/or 4% spread paytables stored on the slot machines/SBG game server.

Note 2: For MICS #101 and #101.1, adding and/or changing progressive percentage contributions to paytables requires the use of a new payable with a new theoretical hold percentage calculated.

101. ~~For licensees that have installed an “On-Line Slot Metering System” approved by the Board pursuant to Regulation 14 Technical Standard 3, that is connected and communicating with the slot machines to read and record the coin-in amount by payable or by wager type of the slot machine, the system is utilized to complete the following procedures that applies only to multi-game and multi-denomination/multi-game machines and for slot machines which have a difference in theoretical hold percentage which exceeds 4 percent for a single-coin play versus maximum-bet play: For other than a SBG, the TS 3 OSMS reads and records the coin-in amount by payable and as needed by wager type for 4% spread paytables. The TS3 OSMS is utilized to complete the following procedures for those slot machines connected and communicating to the TS 3 OSMS:~~

- a. Weekly record the total coin-in meter by slot machine.
- b. Quarterly record the coin-in meters for each payable ~~within all games of the slot machine, the~~ coin-in meter for each payable by denomination when the payable has a different

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### Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

theoretical hold percentage for each denomination and the coin-in meters ~~of the slot machine that contain~~ for each wager type ~~the number of plays by wager (i.e., one coin, two coins, etc.)~~ for 4% spread paytables.

Note: ~~The coin-in meter for each denomination within a game is recorded if a different payable (resulting in a different theoretical hold percentage) is activated for each denomination within a game.~~

- c. At the end of the fiscal year ~~Annually~~ adjust the theoretical hold percentage for the slot machine to a weighted average based upon the ratio of coin-in for each payable in play during the year. For 4% spread paytables, the payable theoretical hold percentage is a weighted average ~~and~~ based on the distribution of plays by wager type during the year. Include the new weighted average percentage for the slot machine in the fiscal year end slot analysis report.

Note: ~~The adjusted theoretical hold percentage can be combined for~~ For multiple slot machines with exactly the same payable mix used throughout the year, the adjusted theoretical hold percentage may be calculated using a weighted average of the ~~adjusted~~ combined slot machines' percentages.

101.1. For a SBG, when the SBG is connected and communicating with the TS3 OSMS and the TS3 OSMS reads and records the coin-in amount by payable and as needed by wager type, the TS3 OSMS is utilized to complete the following procedures for each socket ID:

- a. Weekly record the total coin-in meter by socket ID.
- b. Quarterly, for the paytables with activity associated with the socket ID, record the coin-in meters for the payable, the coin-in meter for each payable by denomination when the payable has a different theoretical hold percentage for each denomination and the coin-in meters for each wager type for 4% spread paytables.
- c. At the end of the fiscal year adjust the theoretical hold percentage for each socket ID to a weighted average based upon the ratio of coin-in for each payable in play during the year. For 4% spread paytables, the payable theoretical hold percentage is a weighted average based on the distribution of plays by wager type during the year. Include the new weighted average percentage for the socket ID in the fiscal year end slot analysis report.

#### **Slot Machine Performance – Slot Machine Meters**

102. - 109. No change related to SSG, SBG and MGS at this time.

#### **Slot Machine Performance – Slot Analysis Report**

110. A slot analysis report is produced at least monthly ~~showing~~ summarizing month-to-date, year-to-date, and if practicable, life-to-date slot machine/socket ID performance ~~actual hold percentage computations for individual machines and a comparison to each machine's theoretical hold percentage previously discussed.~~ A slot analysis report includes:

a. By slot machine/socket ID:

- 1) Denomination or an indication that the slot machine/socket ID is a multi-denomination;

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### Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

2) Slot machine/socket ID number and game type;

Note: “Game type” is a code (or abbreviation) associated with a specific game. For multi-game and/or multi-denomination slot machines, the code would be “MG”. For a SBG, the code would be “SBG”.

3) Coin in;

4) Metered or actual drop (system configurable);

5) Actual jackpot payout slips issued;

6) Actual fill slips issued;

7) Win (statistical and actual, see Note 1);

8) Theoretical hold percentage;

9) Actual hold percentage (see Note 1);

10) Percentage variance (theoretical hold vs. actual hold); and

11) Projected dollar variance (i.e., coin in times the percentage variance).

b. By denomination (with a TS3 OSMS multi-denomination is a separate category) and in total:

1) Floor par (weighted average theoretical hold, see Note 3);

2) Combined actual hold percentage (all statistical win divided by all coin in);

3) Percentage variance (floor par vs. combined actual hold percentage); and

4) Projected dollar variance (i.e., total coin in times the percentage variance).

Note 1: Actual hold = dollar amount of slot ~~machine~~ statistical win divided by dollar amount of coin-in. The wagering activity recorded on the coin-in meter of the slot machine/socket ID includes all cashable and non-cashable credits wagered. The slot ~~machine~~ statistical win represents all drop and payout activity occurring through the slot machine or all drop and payout activity associated with the socket ID regardless of whether the activity is subject to gross gaming revenue taxation. The drop and payout activity ~~occurring through the slot machine~~ includes the following:

- ~~a.~~—The payout activity represents only slot ~~machine~~ payouts associated with the manufacturer’s payable ~~of the slot machine~~. Jackpot payouts (as defined by Regulation 1.140) and fills recorded in the slot analysis report ~~do not~~ include promotional payouts and/or bonus payouts when the payouts are ~~that are not~~ reflected on the payable ~~of the slot machine and/or not~~ and included in the calculation of the ~~slot machine’s~~ theoretical hold percentage.

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- ~~b.~~—The drop activity recorded in the slot analysis report includes all amounts placed into the coin or bill acceptor of the slot machine or a client station associated with the socket ID (e.g., free play wagering instruments accepted by the bill validator ~~of the slot machine~~ are included in the drop amount) or electronic money transfers made to the slot machine or socket ID for wagering purposes. The slot analysis report is configured for drop to match the method used to report revenue (metered or actual).

As a result, the slot ~~machine~~ statistical win recorded in the slot analysis report may not equal the amount of win reported on the NGC tax returns.

Note 2: “Life-to-Date” represents at least a previous two-year cumulative basis.

Note 3: Floor pars are the sum of the theoretical hold percentages of all slot machines/socket IDs within a denomination weighted by coin-in contribution.

Note 4: One report is generated which includes all slot machines regardless if the slot machines communicate with a TS3 OSMS. For SBG and/or MGS, a separate section of the report with applicable subtotals or, alternatively, a separate report may be produced.

111. The theoretical hold percentages used in the slot analysis reports should be within the performance standards set by the manufacturer and should not include other fees (e.g., a percentage payment to operators of inter-casino linked slot machines).

Note 1: For licensees that have installed a non TS metering system or have not installed a metering system, slot machines with game programs stored on EPROMs, that have identical program (EPROM) numbers and with the same exact paytables active, are included in the slot analysis reports using the same theoretical hold percentage. When a range is involved, the theoretical hold percentage used is consistent among games.

Note 2: The optimum hold percentage may be used for ~~video-skill~~ based game paytables ~~machines~~.

112. The theoretical hold percentage used in the slot analysis report represents theoretical performance of the ~~slot machine's~~ payable and excludes promotional payouts and bonus payouts not included in the ~~slot machine's~~ payable.

113. For other than SSG/SBG, eEach change to a slot machine's theoretical hold percentage, including adding and/or changing progressive percentage contributions, requires the use of a new theoretical hold percentage. results in that. When such changes are made, the slot machine is ~~being~~ treated as a new slot machine in the slot statistical analysis reports with a new theoretical hold percentage (i.e., not commingling various hold percentages).

Note 1: For multi-game and ~~or multi-game/~~ multi-denomination slot machines, a new slot machine number is not assigned when paytables that are available for play are changed within the same library of paytables.

Note 2: A new slot machine number is not assigned when a new par percentage used in the slot statistical analysis reports is a result of a correction of an inaccurate par percentage.

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113.1. For a SSG, each change to a slot machine's theoretical hold percentage, including adding and/or changing progressive percentage contributions, requires the use of a new theoretical hold percentage. The slot machine is treated as a new slot machine in the slot analysis reports with a new theoretical hold percentage (i.e., not commingling various hold percentages) unless meter readings are taken to calculate a weighted average theoretical hold percentage for use in the slot analysis report in a manner similar to MICS #101.

Note 1: For multi-game and/or multi-denomination slot machines, a new slot machine number is not assigned when paytables with metered activity remain stored on the slot machine.

Note 2: A new slot machine number is not assigned when a new par percentage used in the slot analysis reports is a result of a correction of an inaccurate par percentage.

114. Promotional payouts and/or bonus payouts, not reflected on the paytable ~~of the slot machine~~ and /or not included in the calculation of the ~~slot machine's~~ theoretical hold percentage, are not included in slot ~~machine~~ statistical win for statistical performance purposes in the slot ~~statistical analysis~~ reports. However, these payouts may be included in the slot ~~statistical analysis~~ report as a separate disclosure for the calculation of slot ~~machine-reportable~~ win as reported in the NGC tax returns.

Note: Refer to "Note 1" of MICS #110 for further explanation.

~~115.—A report is produced at least monthly showing year-to-date combined slot machine performance by denomination. All multi-denomination machines are grouped as a separate category from other denominations in the slot analysis report. The "International Gaming Salon" slot machines as addressed at MICS #88 are categorized within the appropriate denomination. The report shall include the following for each denomination and the multi-denomination category, if applicable:~~

~~a.—Floor par.~~

~~Note:—Floor pars are the sum of the theoretical hold percentages of all machines within a denomination weighted by coin-in contribution.~~

~~b.—Combined actual hold percentage.~~

~~c.—Percentage variance (b – a).~~

~~d.—Projected dollar variance (i.e., coin-in times the percentage variance).~~

116. The monthly slot analysis ~~statistical~~ reports are reviewed by both slot department management and management employees independent of the slot department on at least a monthly basis.

117. At a minimum, large year-to-date variances between theoretical hold and actual hold, by slot machine/socket ID and by denomination (including the multi-denomination category), are investigated and resolved with the findings documented no later than 30 days after the generation of the slot analysis ~~statistical~~ report. Alternatively, life-to-date variances are examined when there is insufficient coin-in activity resulting in large year-to-date variances.

118. For purposes of analyzing large variances between actual hold and theoretical hold percentages, information to create floor par reports by similar slot machine type must be maintained.

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### Proposed Revisions to Minimum Internal Control Standards For MGS, SBG and SSG

Note 1: “Type” is defined as the manufacturer’s game program number.

Note 2: This ~~standard~~ MICS does not apply to slot machines that have multiple paytables with different theoretical hold percentages (i.e., multi-game and ~~or multi-game~~/multi-denominational slot machines) and to SBG.

119. Maintenance of the slot machine/socket ID computer data files is performed by a department independent of the slot department. Alternatively, maintenance of the theoretical hold percentage for each slot machine/socket ID may be performed by slot supervisory employees if sufficient documentation is generated and it is randomly verified by employees independent of the slot department on a monthly basis.

Note: “Slot machine/socket ID computer data files” include the theoretical hold percentage, coin-in amount, drop ~~amounts~~, payout ~~amounts~~, fill s amount and win amounts s for each slot machine/socket ID.

120. Updates to the slot machine/socket ID computer data files to reflect slot machine additions, deletions or movements ~~of slot machines~~ and socket ID additions, deletions or changes are made at least weekly, and prior to in-meter readings, generation of system (e.g., CWS, TS3 OSMS, SBG) reports and the slot count process.

#### ***On-line Slot Metering Systems***

Note 1: Applicability: MICS #121 - #135 apply to licensees that have installed a “TS3 OSMS”, ~~an “On-Line Slot Metering System” and/or a cashless wagering system approved by the Board pursuant to Regulation 14 Technical Standard 3.~~ MICS #121 - #135 also apply to licensees that have installed a Board-approved cashless wagering system not meeting the requirements of Regulation 14 Technical Standard 3. ~~For these systems the MICS apply only as they relate to the meter information that can be obtained by the system.~~

Note 2: Licensees with a Board-approved ~~cashless wagering system~~ CWS, that ~~do not use an on-line slot interfaces with a non TS3~~ metering system, ~~that is capable of obtaining meter information directly from the slot machines~~ only need to comply with MICS # 131(b), #132(a) and #133, instead of MICS #121 - #135.

Note 3: For SBG, meter information is compiled by socket ID rather than slot machine. ~~As of 5/22/05, certain licensees, as required by Regulation 6.045, must have installed an “On-Line Slot Metering System” and cashless wagering system, if applicable, that have been approved by the Board pursuant to Regulation 14 Technical Standard 3.~~

121. ~~For licensees that have installed a Board approved “On-Line Slot Metering System” and/or a cashless wagering system, the system~~ The TS3 OSMS is connected, functioning and communicating with slot machines or the SBG game server in obtaining slot machine/socket ID meter information as follows:
- a. For all slot machines equipped with meters described by the Regulation 14 Technical Standards, approved on or after ~~2/1/04~~ 8/1/04, and all meters for SBG socket IDs, all meter information, as applicable to the licensee’s operation, is transmitted to the ~~system~~ TS3 OSMS, unless this requirement is waived for slot machines by the chairman pursuant to Regulation 6.045.

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- b. For slot machines approved before ~~2/1/04~~8/1/04 that are equipped with meters described by the Regulation 14 Technical Standards, a minimum of the coin-in, coin drop and bill-in meter information is transmitted to the ~~system~~ TS3 OSMS, unless this requirement is waived for slot machines by the chairman pursuant to Regulation 6.045.
- c. For any slot machines or SBG game server equipped with cashless wagering meters, the applicable cashless wagering meter information is transmitted to the ~~cashless wagering system~~ CWS, unless this requirement is waived for slot machines by the chairman.
122. At least monthly, prepare and maintain a list of slot machines not permanently connected to the ~~on-line slot metering system and/or cashless wagering system~~ TS3 OSMS and/or CWS along with the reason the slot machine is not permanently connected. Also, include separately on this list the slot machines connected to the ~~on-line slot metering system~~ TS3 OSMS that do not have all of the required meters for slot machines approved before ~~2/1/04~~8/1/04.
123. For a TS3 OSMS on-line slot metering system ~~s~~ that reads the specific values indicated on slot machine/socket ID meters, all required meters are read, recorded and maintained by the ~~on-line slot metering system~~ TS3 OSMS before and after any slot machine/socket ID maintenance that involves the clearing or resetting of the meters. For a SSG, before and after any software is added or removed from a slot machine, if the meter information could be lost, all required meters for the slot machine are read, recorded and maintained by the TS3 OSMS. For a SBG, before and after any software is added or removed from the game server, if the meter information could be lost, all required meters for each socket ID are read, recorded and maintained by the TS3 OSMS. This meter information will be used when reviewing slot ~~machine~~ performance reports to ensure that the maintenance performed did not improperly affect the meter values recorded in the slot ~~machine~~ performance reports.
124. All required meters for each slot machine/socket ID are read, meter amounts recorded and maintained at the time a drop box (coin or currency) is removed in conjunction with a slot drop.
125. Slot machine/socket ID meters that accumulate wagering account transfers and electronic funds transfers are read, meter amount recorded and maintained at the end of the licensee's specified 24-hour accounting period. This same 24-hour cutoff is applied to the ~~cashless wagering system~~ CWS when generating ~~system~~ CWS reports.
126. For slot machines that are not dropped and counted, the TS3 OSMS on-line slot metering systems shall read and record the following slot machine/socket ID meters at the end of the licensee's specified 24-hour accounting period:
- "Attendant Paid Meters" (jackpots, cancelled credits, external bonus payout, and progressive payout).
  - Physical coin-in.
  - Physical coin out.
  - "Drop Meters" (coin drop, bill-in, voucher in and coupon promotion in).
  - "Electronic Promotion Meters" (cashable in, cashable out, non-cashable in and non-cashable out).

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- f. "Machine Paid Meters" (external bonus payout and progressive payout).
127. For each 24-hour accounting period, the accounting department reviews all meter readings for reasonableness using pre-established parameters.
128. Prior to the preparation of metered slot ~~machine~~-performance reports, meter readings which do not appear reasonable are reviewed with slot department employees, and exceptions documented, so that any necessary repairs can be made and errors corrected. The final metered slot ~~machine~~-performance reports are reviewed to ensure that the correct meter amounts have been recorded.
129. Meter reading amounts may only be altered to correct amounts that were determined to be unreasonable. When correcting meter amounts, indicate the correct amount in the appropriate ~~on-line slot metering system~~-TS3 OSMS report.
130. The following TS3 OSMS slot ~~machine~~-performance reports, as applicable, are produced and maintained for each day for slot machines/socket IDs that have not been dropped (hard or soft):
- Meter attendant paid jackpots, cancelled credits, progressive payouts and external bonus payouts (in total) vs. actual attendant paid jackpots, cancelled credits, progressive payouts and external bonus payouts (in total).
  - Meter fills vs. actual fills.

Note: Refer to Regulation 14 Technical Standard 3 "~~Integrity of and Proper Accounting for On-Line Slot Systems~~" for the calculation used in determining the meter fill dollar amount.

- Meter machine paid and attendant paid external bonus payouts vs. external bonusing system machine paid and attendant paid external bonus payouts.
- ~~Gaming device m~~Meter wagering account transfer (WAT) in vs. CWS system-wagering account transfer (WAT) in.
- ~~Gaming device m~~Meter wagering account transfer (WAT) out vs. CWS system-wagering account transfer (WAT) out.
- ~~Gaming device m~~Meter electronic funds transfer (EFT) in vs. CWS system-electronic funds transfer (EFT) in.
- ~~Gaming device m~~Meter cashable electronic promotion in vs. CWS system-cashable electronic promotion in.
- ~~Gaming device m~~Meter cashable electronic promotion out vs. CWS system-cashable electronic promotion out.
- ~~Gaming device m~~Meter non-cashable electronic promotion in vs. CWS system-non-cashable electronic promotion in.
- ~~Gaming device m~~Meter non-cashable electronic promotion out vs. CWS system-non-cashable electronic promotion out.

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- k. Meter voucher out vs. CWS system-voucher and payout receipt forms issued.
  - l. ~~Gaming device m~~Meter coupon promotion out vs. CWS system-coupon promotion out forms issued.
131. In addition to the slot machine performance reports under MICS #130, the following TS3 OSMS reports are produced and maintained for each drop (hard or soft) date, by slot machine/socket ID and in total:
- a. Meter drop vs. actual drop for each drop type (e.g., coin and bills).
  - b. CWS System-wagering instruments accepted vs. wagering instruments counted in the count room (e.g., vouchers and coupons).
  - c. Meter win vs. actual taxable win.
- Note: Refer to Regulation 14 Technical Standard 3 ~~"Integrity of and Proper Accounting for On-Line Slot Systems"~~ for the calculation used in determining the meter win dollar amount.
- d. ~~Gaming device m~~Meter voucher in vs. CWS system-voucher in forms accepted.
  - e. ~~Gaming device m~~Meter coupon promotion in vs. CWS system-coupon promotion in forms accepted.
132. Variances, by slot machine/socket ID, noted in the reports required by MICS #130 and #131 that are in excess of the following parameters are reviewed by the accounting department:
- a. Variances in excess of one percent or \$100, whichever amount is greater, for each drop type (coin, bills, vouchers and coupons).
  - b. Variances in excess of one percent or \$100, whichever amount is greater, for the total of attendant payouts.
  - c. Variances in excess of one standard hopper fill dollar amount for fills.
  - d. Variances in excess of one percent or \$100, whichever amount is greater, for win.
  - e. Any variance noted between ~~gaming device~~ meters and CWS system meters for wagering account transfers (WAT) in and out, electronic funds transfer (EFT) in, cashable electronic promotion in and out, non-cashable electronic promotion in and out, external bonus payouts, vouchers out and coupon promotion out.
133. The results of the variance investigation, including the date of and personnel involved in the investigations, are documented in the appropriate report and retained. The results shall also include any corrective action taken (e.g., meter replaced, interface component repaired, software debugged, etc.). The investigation is completed and the results are documented within seven days of the day the variance was noted.

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Note: Material attendant payout variances noted in MICS #130(a) may be due to an attendant paid progressive jackpot payout amount or wide-area progressive payout amount not being recorded on the gaming device attendant paid progressive payout meter. The ~~gaming device~~-attendant paid progressive payout meter may not have the capability to obtain the dollar amount of the progressive amount displayed on the progressive sign. If the variance is due to a progressive jackpot payout the investigation should include the review of the daily progressive payoff dollar amounts recorded pursuant to Regulation 5.110 to determine that the decrease is reasonably equivalent to the actual progressive jackpot payout dollar amount. For a wide-area progressive payout the investigation should include the review of the report of payouts from the operator of the wide-area progressive system.

134. [TS3 OSMS e](#)Exception reports are reviewed on a daily basis for propriety of transactions and unusual occurrences.

135. At least monthly, accounting/audit supervisory personnel confirm that the appropriate investigation has been completed for the above review of variances.

136. - 150. No change related to SSG, SBG and MGS at this time.

#### **Slot Wagering Account Transfers**

Note [1](#): A wagering account transfer is a transfer of funds between an established patron's wagering account and a slot machine/[socket ID](#).

[Note 2: The following MICS also apply when a wagering account functions as a subsidiary account \(or sub-account\) of a patron's master account with the transfers to/from other sub-accounts and the master account of the licensee considered in any reconciliations and summaries.](#)

151. In order to facilitate the reconciliation required by MICS #159b, slot wagering accounts must be established at one [designated](#) area of accountability (e.g., main casino cage). Further, all subsequent deposits/withdrawals and account adjustments must be transacted [through](#) ~~at~~ the same [designated](#) area of accountability.

[Note: This MICS does not require all patron transactions to be performed at the designated area of accountability.](#)

152. For each wagering account established, an employee shall:

- a. Require the patron to personally appear at the licensee's premises [prior to the patron completing a wagering account transaction](#).
- b. Examine in the patron's presence, the patron's valid driver's license or other reliable identity credential.
- c. Record:
  - 1) The patron's name, ~~or other unique identifier of the patron, if requested by patron.~~

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- 2) Type of identification credential, credential number, expiration date of credential, and date credential was examined.

Note: A patron's driver's license is the preferred method for verifying the patron's identity. A passport, non-resident alien identification card, other government issued identification credential or another picture identification credential normally acceptable as a means of identification when cashing checks, may also be used.

- 3) The dollar amount of the patron's initial deposit.
- 4) The patron's slot wagering account number.
- 5) The date the patron's account is opened.

153. Procedures are in place to provide a secure method for a patron to access a wagering account.
154. Prior to the patron making a cash withdrawal from a wagering account, the cashier must verify the identity of the patron and availability of funds through the ~~cashless wagering system~~ CWS.
155. A deposit/withdrawal, other than through actual slot machine play, is evidenced by at least a two-part document, with one part remaining in the cashier's area and the other part given to the patron when a deposit or withdrawal is made. An adjustment to a patron's wagering account is also documented and maintained.
156. The deposit/withdrawal/adjustment document contains the following information:
  - a. Same document number on all copies.
  - b. Patron's name ~~or other unique identifier of the patron~~, account number, and signature.

Note: Adjustments to the wagering account do not require the patron's signature.

- c. Date of deposit/withdrawal or account adjustment.
  - d. Dollar amount of deposit/withdrawal or account adjustment.
  - e. Nature of deposit/withdrawal (e.g. cash, check, chips).
  - f. Reason for adjustment to wagering account, if applicable.
  - g. Signature of employee handling the transaction.
157. Adjustments to wagering accounts are made by personnel authorized by management with such personnel's job titles delineated within the slots section of the written system of internal control pursuant to Regulation 6.090.
158. Procedures are established to maintain a detailed record for each patron's wagering account that includes the dollar amount of all funds deposited and withdrawn specifically to or from the slot wagering account, account adjustments made, ~~and~~ the transfers to/from slot machines (WAT in and WAT out) and WAT win. This record is available to the patron upon request.

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159. The total of all slot wagering accounts are reconciled by employees of the designated area of accountability, as follows:
- For each shift, generate a report from the ~~cashless wagering system~~ CWS that details the beginning and ending balance of wagering accounts, adjustments to wagering accounts, ~~and~~ the wagering account transfers to and from slot machines.
  - Reconcile the ending and beginning balances (per the CWS system) to the hard copy deposit/withdrawal documentation, account adjustment documentation, and the wagering account transfers (per the CWS system).
160. All slot wagering account deposits/withdrawals, account adjustments, ~~and~~ wagering account transfers to/from slot machines are summarized in total on an accountability form on at least a per shift basis.
161. Slot department wagering account revenue (transfers to slot machines less transfers from slot machines or WAT win) is summarized and posted as a single line item on an accountability form on at least a daily basis.
162. - 176. No change related to SSG, SBG and MGS at this time.

#### **Slot Accounting/Audit Procedures**

177. - 183. No change related to SSG, SBG and MGS at this time.

183.1. Daily, for SSG and SBG, a minimum of one individual who is not authorized to add, delete or change game programs, reviews the SSG/SBG report, required by Technical Standard 1.084(2) and 1.086(2), indicating the results of the automated execution in validating program components. All noted invalid program components, improper transactions or unusual occurrences are investigated with the results documented.

Note: For this MICS, this individual is not required to be independent of the slot operation.

184. For licensees that utilize ~~an a TS3 OSMS or non TS3 on-line slot~~ metering system (including licensees that use a metering system only to obtain coin-in meter readings), at least monthly procedures are performed to verify that the ~~on-line slot~~ metering system is transmitting, receiving, and recording data from the slot machines/SBG game server properly for the following slot machine/socket ID meters, as applicable to the operation:
- ~~Coin-In (includes the coin-in by payable for multi-game and multi-denomination/multi-game slot machines, and the coin-in by wager type for machines which have a difference in theoretical payback percentage which exceeds 4 percent for a single coin play versus maximum bet play)~~
  - Coin-In by payable for multi-game and/or multi-denomination slot machines or a SBG (only required if utilizing a TS3 OSMS, see MICS #101 and #101.1)
  - Coin-In by wager type for 4% spread paytables (only required if utilizing a TS3 OSMS, see MICS #101 and #101.1)
  - ~~Electronic Promotion Meters (cashable in, cashable out, non-cashable in and non-cashable out)~~
  - ~~Wagering Account Transfer In~~

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- ~~• Wagering Account Transfer Out~~
- ~~• Electronic Funds Transfer In~~
- ~~• Electronic Funds Transfer Out~~

These procedures will include at a minimum the following:

- Select a sample of at least 3 percent of the slot machines connected to the ~~on-line slot~~ metering system. Each slot machine interfaced with the ~~on-line slot~~ metering system should be reviewed at least once during a two-year calendar period. Maintain a record for each two-year calendar period indicating the date each slot machine was reviewed. There is no requirement to review slot machines prior to being removed from patron availability even if the slot machines have not yet been reviewed during the current two-year period.
  - For the slot machines selected, manually read and record the electronic (soft) meters.
  - Compare the manual readings to the metering system-generated readings report and document all variances. For ~~on-line slot~~ metering systems that:
    - ~~Read the specific value indicated on the slot machine meters, compare the slot machine meter amounts to the meter amounts per the on-line slot metering system to determine that the amounts agree; or Compare the manual readings to the system-generated readings report and document all variances.~~
    - ~~d. For on-line slot metering systems that h~~Have their own meters (e.g., delta system), perform two readings of the slot machine meters, calculate the change in the meter readings between the two readings, and ~~to~~ determine that both the system meters and the slot machine meters are incrementing by the same amount. ~~Compare the manual readings to the system-generated readings report and document all variances.~~
  - For one socket ID, manually read the meters on the SBG game server. Compare the manual readings to the metering system-generated readings report and document all variances.
  - Document the test and the results of investigations into all variances, by slot machine/socket ID.
185. Quarterly, for other than SBG, for multi-game and or multi-denomination/~~multi-game slot~~ machines and for 4% spread paytables ~~machines that have a difference in theoretical payback percentage that exceeds 4 percent for a single coin play versus maximum bet play~~, reconcile the combined coin-in dollar amounts by payable and by wager type to the total coin-in dollar amount of the slot machine. Investigate unreconciled variances with slot department employees, and document exceptions, so that meters can be repaired or clerical errors in the recording of meter amounts can be corrected.
- Note: This ~~standard~~ MICS applies only to licensees that have installed ~~an a~~ TS3 OSMS. ~~“On-Line Slot Metering System”, approved by the Board pursuant to Regulation 14 Technical Standard 3, that reads and records the coin-in amount by payable of the slot machine and by wager type of the slot machine.~~

185.1 Quarterly, for a SBG for each socket ID, reconcile to total coin-in, the combined coin-in by payable and by wager type for 4% spread paytables.

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186. - 187. No change related to SSG, SBG and MGS at this time.

188. At least annually, for slot machines, accounting/audit personnel shall randomly verify that **EPROM game program** changes resulting in a change in par percentage or the assignment of a new slot machine number are properly reflected in the slot analysis reports.

189. Accounting/audit employees review exception reports for all computerized slot systems on a daily basis for propriety of transactions and unusual occurrences. All noted improper transactions or unusual occurrences are investigated with the results documented. The computerized slot systems include, but are not limited to, CWS, jackpot/fill system, TS3 OSMS, SSG and SBG.

190. - 200. No change related to SSG, SBG and MGS at this time.

#### SBG Special Accounting/Auditing Procedures

200.1. For each day, compare the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win indicated on the SBG revenue report to the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win on the SBG WAT In and WAT Out detail report (by socket ID).

200.2. For each day, compare the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win indicated on the SBG revenue report to the total dollar amount of WAT In, total dollar amount of WAT Out and total dollar amount of WAT Win on the CWS patron wagering account detail report.

200.3. For each day, compare the WAT Win amount indicated on the CWS patron wagering account detail report to the total dollar amount of WAT Win indicated in the cage accountability.

200.4. For each day, randomly select two WAT In transactions and two WAT Out transactions from the SBG WAT In and WAT Out detail report (by wagering account) and trace the transaction to the CWS patron wagering account detail report.

201. - 207. No change related to SSG, SBG and MGS at this time.

### Information Technology Minimum Internal Control Standards

1. - 22. No change related to SSG, SBG and MGS at this time.

23. For SBG and SSG, daily review the physical security requirements related to SBG and SSG:

a. Ensuring the proper use of split or dual passwords by administrators; and

b. Ensuring that access to computer server and system components are adequately restricted.