SKILL-BASED CHARITABLE GAMING STANDARDS

Technical Standards

What the device and the system must do, and how a laboratory certifies it.

DESIGNATION	PREPARED BY	PUBLISHED BY	LOCATION
SBCGS-T	Tony Morelli, PhD	Institute for Emerging Gaming Markets	Charleston, SC

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1.0	WORKING DRAFT

PREFATORY NOTE

This is the technical standard in the SBCGS family. It states what a covered device and the system supporting it must do, in terms a testing laboratory can certify by executing test cases against a prototype and by examining source code and logs.

The register differs from SBCGS-M. SBCGS-M states what a person must do, verifiable by an assessor examining records and procedures. SBCGS-T states what a system must do, verifiable by a laboratory. Compare the same subject in each layer:

SBCGS-M § 304(c)(1), as drafted. A covered operator offering a skill-represented product shall disclose the return at optimal skill and the return at absent skill, each expressed as a percentage of the amount committed and stated to one decimal place, presented together and with equal prominence.

SBCGS-T § 823, as drafted. The device shall display both figures on the primary display, reachable by a single input from the state in which consideration may be committed, in type not smaller than that used for the award schedule, and shall not display either figure without the other. *Test: from the idle state, actuate the control identified in the rules of play; confirm both figures appear in a single view; confirm the type size; attempt to configure the device to suppress one figure and confirm the configuration is rejected.*

Part 810 is the reason this document exists. Everything else in it is a competent restatement of requirements that appear, in some form, in 25 C.F.R. part 547, in Ohio's Appendix A to rule 3772-50-24, in Minnesota Rules 7864.0235, or in GLI-11. Part 810 has no counterpart. It takes the three measures defined in SBCGS-C § 106 and states how a laboratory determines each of them, what the device must record so that the third can be determined at all, and what a design may not do to defeat them.

The three measures are worth restating plainly, because the entire category turns on them:

1. **How much can the skill element move the return.** Nevada sets a floor on theoretical payout and requires a device to say that skill affects the outcome. GLI-11 acknowledges that the method of play moves the return. Neither requires either end of the range to be computed. Sections 812 and 813 state how each end is determined and § 814 states the difference.
2. **Can an ordinary player find and use it.** Ohio disqualifies a device where success depends on a skill "that no reasonable player could exercise," and leaves the phrase to a tribunal. Section 815 states it as five conditions, each of which a laboratory can observe.
3. **Do players actually use it.** Nobody asks. The answer is not obtainable in a laboratory, because it is a fact about players and not about the device. Section 816 therefore requires the device to record it, in a form the monitoring system carries, so that the question becomes answerable in the field. This is the least expensive requirement in the family and the one with the largest effect on what anybody can honestly claim about this category.

This standard does not state whether a device is lawful, and does not classify a device as a skill game. Classification is SBCGS-C. GLI-11 makes the same disclaimer and it is correct.

PART 800

GENERAL REQUIREMENTS

§ 801 Purpose and application

(a) This standard states the technical requirements applicable to a covered device and to the system supporting it.

(b) A requirement applies to a covered device as determined under SBCGS-C. A requirement stated for a skill-represented product applies only where a skill representation is made as determined under SBCGS-C § 105.

(c) A requirement in Part 850 applies to the monitoring system and to the covered operator that maintains it.

(d) Where a jurisdiction imposes a stricter technical requirement, the stricter requirement governs. Conformity with this standard is not a substitute for an approval required by applicable law.

§ 802 Definitions

Terms defined in SBCGS-C and SBCGS-M have the same meaning here. In addition:

Configuration means the set of parameter values in effect on a covered device that determine the cost of a play, the award schedule, the theoretical return, and the behavior of any skill element.

Critical memory means memory storing information whose loss or corruption would affect accounting, award liability, player balance, exclusion status, limit state, or the reconstruction of a play.

Idle state means the state of a covered device in which no play is in progress and consideration may be committed.

Null strategy means the method of play defined in § 813(b).

Optimal strategy means the method of play defined in § 812(b).

Primary display means the display on which the outcome of a play is presented to the player.

Prototype means the covered device, in the hardware and software identification submitted, against which a laboratory performs testing under Part 880.

Skill event means an occurrence in which a skill element becomes available to a player on a play.

Test laboratory means a laboratory meeting § 881.

§ 803 Rules of general application

(a) A covered device shall operate only software that a test laboratory has examined and that a report under § 883 identifies, and shall not load or execute software from a source that the device cannot authenticate.

(b) A covered device shall function in accordance with its rules of play, its award schedule, and the configuration recorded for it, and shall not present to a player a rule, an award schedule, or a return that differs from the one in effect.

(c) A covered device shall not contain a function, however invoked, that alters outcome, award value, the availability of an award, or the behavior of a skill element, other than a function described in the rules of play or in the report under § 883.

(d) A covered device shall be identified by an irremovable plate placed where it is visible to a player, stating the manufacturer, the model, and the serial number.

Basis: Pa. H.B. 2557, § 5302(b)(2) (2026); 25 C.F.R. § 547.7.

(e) A covered device shall make its software identification available for display without opening the cabinet, and shall support an independent verification of its program storage from an external source.

Basis: Ohio Admin. Code 3772-50-24 app. A, Software Verification; 25 C.F.R. § 547.8.

§ 804 Fairness and non-adaptivity

(a) A covered device shall apply the same rules, the same award schedule, and the same difficulty to every player in the same configuration.

(b) A covered device shall not vary, by reference to the identity of a player, the player's prior play, the player's demonstrated proficiency, the device's prior outcomes, or the revenue the device has generated:

(1) the probability of any outcome;

(2) the value of any award;

(3) the availability of any award or of any skill element; or

(4) the difficulty of any skill element.

Basis: Ohio Rev. Code § 2915.01(UU)(2)(a) and (c); Ohio Admin. Code 3772-50-24 app. A, Game Outcome items 6 and 7; GLI-11 v3.0 § 4.20.6.

(c) Where a configuration is changed, the change shall take effect only in the idle state, shall apply uniformly to every subsequent player, and shall be recorded under § 862.

(d) A covered device shall not present a rule, an award schedule, or a return that has changed since the player committed consideration for the play in progress.

§ 805 Fail-safe behavior

(a) Where a control required by this standard or by SBCGS-M is unavailable, a covered device shall refuse to accept consideration and shall display that play is unavailable. It shall not accept consideration and operate without the control.

(b) Subsection (a) applies at least where:

(1) communication with the monitoring system has been unavailable for the period stated in § 851(d);

(2) the exclusion data required by § 832 cannot be evaluated;

(3) age or identity verification under § 831 cannot be performed;

(4) a meter required by § 841 cannot be written;

(5) critical memory has failed a verification under § 872; or

(6) the device cannot record a play under § 861.

(c) A covered device entering the state described in subsection (a) shall preserve any play in progress and any player balance, shall permit the player to redeem the balance, and shall record the event under § 862.

(d) A covered device shall not resume accepting consideration after an event in subsection (b) until the condition is cleared and the clearance is recorded.

PART 810

SKILL MEASUREMENT AND VERIFICATION

§ 811 Application and general requirement

(a) This Part applies to a skill-represented product.

(b) A test laboratory shall determine, for each configuration of the product submitted, the return at optimal skill under § 812, the return at absent skill under § 813, the skill influence range under § 814, and each condition of accessibility under § 815, and shall state each in the report under § 883.

(c) A covered device shall instrument each skill event as required by § 816 so that the skill realization rate can be determined in the field.

(d) A determination under this Part is made for each configuration for which the cost of a play, the award schedule, the theoretical return, or the behavior of a skill element differs.

(e) A determination under this Part is not a determination that skill predominates over chance, and shall not be represented as one.

§ 812 Return at optimal skill

(a) The return at optimal skill is the expected value returned to a player as a percentage of the amount committed, computed under the optimal strategy, over the configuration submitted.

(b) The optimal strategy is the method of play that maximizes expected return, in which the player:

(1) engages every skill element on every play on which it becomes available;

(2) completes every skill element without error;

(3) makes every decision the product permits so as to maximize expected return; and

(4) has no information the device does not present to a player.

(c) The determination shall be made analytically where a closed form exists. Where it does not, it shall be made by simulation of not fewer than ten million plays per configuration, and the half width of the ninety five percent confidence interval shall not exceed one tenth of one percentage point. The method, the number of plays, and the interval shall be stated in the report.

(d) Where the product permits a range of amounts to be committed on a play, the determination shall be made for the minimum and for the maximum, and both shall be stated.

Basis: Nev. Gaming Comm'n Reg. 14.040(1)(a), which requires a minimum theoretical payout of 75 percent for each wager available on a device, read with Reg. 14.010(10) and (14), which define a game of skill and a hybrid game by reference to the outcome over a period of continuous play.

§ 813 Return at absent skill

(a) The return at absent skill is the expected value returned to a player as a percentage of the amount committed, computed under the null strategy, over the same configuration.

(b) The null strategy is the method of play in which the player:

(1) does not engage any skill element on any play;

(2) where the product cannot advance unless the player performs an act, performs the act in the manner requiring the least time and the least information, and where the product advances without an act after a period, does not act;

(3) makes no decision the product permits, and where a decision is required, takes the option presented first or the default; and

(4) commits the same amount on each play as was assumed under § 812.

(c) Subsection (c) of § 812 applies to the determination under this section.

(d) Where the null strategy would cause the product not to advance at all, the report shall so state, and the return at absent skill shall be determined under the strategy that advances the product with the least player action.

> **NOTE**

> Paragraph (b)(2) is the provision that decides the case the category was built around. Where a device offers a skill element after a losing play, reachable only by actuating a prompt, the null strategy does not actuate the prompt. The return at absent skill is therefore the return of the base game alone, and the skill influence range is the whole of what the skill element contributes. Where instead a device requires the player to place a symbol in order for the play to resolve at all, the null strategy places it in the least effortful way, and the difference between that and optimal placement is what the skill element is worth.

§ 814 Skill influence range

(a) The skill influence range is the return at optimal skill less the return at absent skill, stated in percentage points to one decimal place.

(b) The report under § 883 shall state the skill influence range for each configuration and for each amount determined under § 812(d).

(c) Where the skill influence range is zero, the report shall so state, and the product cannot be a demonstrated skill product under SBCGS-C § 106(g)(1).

§ 815 Skill accessibility

(a) A test laboratory shall determine whether each skill element is accessible. A skill element is accessible only where each of the following is true.

(b) **Described.** The rules of play state that the skill element exists, how it is reached, what the player must do, and what the player receives for completing it, and the rules of play are reachable from the idle state by a control identified on the primary display.

(c) **Reachable on the device.** The skill element can be reached by a player using only information presented on or at the covered device. A skill element that can be reached only by a player who has been told of it by another person, or who has read a document not presented at the device, is not accessible.

(d) **Prompted.** Where the skill element becomes available following a play, the device presents a prompt on the primary display that:

(1) states in plain language what the player may do and what the player may receive;

(2) remains available for not less than the greater of fifteen seconds or the period for which the device permits consideration to be committed for a further play; and

(3) is presented in type not smaller than that used for the award schedule.

(e) **Bounded in time.** The skill time cost ratio does not exceed twenty, where the skill time cost ratio is the median elapsed time required to complete the skill element under the optimal strategy divided by the median elapsed time required to complete a base play. The laboratory shall measure both by execution against the prototype and shall state both in seconds.

(f) **Not defeated by design.** No condition in § 818 is present.

Basis: Ohio Rev. Code § 2915.01(UU)(2)(e) and (f); Ohio Admin. Code 3772-50-24 app. A, Game Rules items 1 and 2, and Game Outcome items 3 through 7.

> **NOTE**
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> The conditions in this section are drawn from a factual record. In the devices before the Supreme Court of Pennsylvania, the skill element was not described in the general instructions, was reached only through an unexplained prompt available for a few seconds after a losing play, took approximately twelve minutes to complete against a base play of a few seconds, and returned at most twenty cents on a four dollar commitment. Subsections (b), (d), and (e) each fail on those facts, and each fails on an observation a laboratory can make in an afternoon.

§ 816 Instrumentation of skill events

(a) A covered device shall record, for each play:

(1) whether a skill element became available;

(2) whether the player initiated it;

(3) whether the player completed it;

(4) the elapsed time from the presentation of the prompt to initiation, and from initiation to completion or abandonment;

(5) the value returned on the play, and the portion of that value attributable to the skill element; and

(6) the identification of the skill element, where the product contains more than one.

(b) A covered device shall transmit the records required by subsection (a) to the monitoring system, in the aggregate form stated in § 852(a)(6), on the schedule stated in § 851.

(c) A covered device shall maintain cumulative meters for skill events available, skill events initiated, and skill events completed, subject to § 841.

(d) The records required by this section shall be sufficient to compute the skill realization rate defined in SBCGS-C § 106(f) for the device, for the product, and for the configuration, over any period.

(e) The records required by this section shall not include information identifying a player, except where the covered operator maintains a player account and the jurisdiction permits it.

§ 817 Confinement of chance

(a) A random number generator, whether consulted before or during a play, shall not limit the value a player can obtain by successful application of a skill element.

(b) A covered device shall not consult a random number generator after the player has begun a skill element for the purpose of determining whether the skill element succeeds.

(c) Where a skill element determines whether an award is made, the device shall determine success solely from the player's performance measured against a criterion fixed before the skill element began.

(d) A covered device shall measure the task the player performs accurately and consistently from one player to the next.

Basis: Ohio Admin. Code 3772-50-24 app. A, Game Outcome items 3, 4, and 7.

(e) A random number generator used in a covered device shall be tested for statistical randomness and for unpredictability, and the report under § 883 shall state the tests applied and the results.

Basis: 25 C.F.R. § 547.14.

§ 818 Prohibited skill-defeating designs

A covered device offering a skill-represented product shall not:

(a) present a skill element whose availability, difficulty, or value depends on the player's prior performance, on the device's prior outcomes, or on the revenue the device has generated;

(b) present a skill element that cannot be completed by a player performing correctly, or whose criterion for success is not fixed before the element begins;

(c) present a skill element whose completion returns a value that does not exceed the value returned for not completing it;

(d) present, as a skill element, an input that does not change the value returned on the play in which it is made;

(e) impose a delay, an interruption, or a repetition within a skill element that is not necessary to the task the player performs;

(f) present the prompt for a skill element in a manner that a player is likely to dismiss by performing the action required to commit consideration for a further play;

(g) withdraw the opportunity to engage a skill element on the ground that the player has previously completed it; or

(h) require, in order to reach a skill element, an input sequence longer than three player actions from the state in which the element becomes available.

> **NOTE**
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> Subsection (c) states a floor that ought to be unnecessary and is not. A skill element that returns less than doing nothing is not a skill element, whatever it is called. Subsection (f) addresses the design in which the prompt to engage the skill element occupies the position

that the play button occupies a moment later, so that a player continuing to play dismisses it without seeing it.

§ 819 Content of the laboratory report on this Part

The report under § 883 shall state, for each configuration:

(a) the return at optimal skill, the method of determination, and where by simulation the number of plays and the confidence interval;

(b) the return at absent skill, the null strategy applied, and the same method information;

(c) the skill influence range;

(d) each condition in § 815, whether it is satisfied, and the observation supporting the conclusion, including the measured times under § 815(e);

(e) each condition in § 818, and whether it is present;

(f) the results of the tests in § 817(e);

(g) confirmation that the instrumentation required by § 816 operates, with the test performed; and

(h) the resulting classification available under SBCGS-C § 106(g), stated as provisional pending determination of the skill realization rate.

PART 820

PLAYER INTERFACE AND DISCLOSURE

§ 821 Rules of play

(a) A covered device shall present the rules of play on the primary display, reachable from the idle state by a control identified on the primary display, and shall present them before consideration is committed if the player requests them.

(b) The rules of play shall state the cost of a play, the amounts that may be committed, the award schedule, the maximum award on a single play, how a play resolves, and, for a skill-represented product, the matters required by § 815(b).

(c) Where the rules of play or the award schedule change, the device shall display notice of the change before the next play.

Basis: Ohio Admin. Code 3772-50-24 app. A, Game Rules items 1 and 3; GLI-11 v3.0 § 4.20.6; Pa. H.B. 2557, § 5302(b)(3) (2026).

§ 822 Session information

(a) A covered device shall display continuously, while a session is in progress, the elapsed session time, the amount committed in the session, the value of awards received in the session, and the net position for the session.

(b) Upon a suspension under § 834, the device shall display the same information in a view that requires a player action to dismiss.

Basis: Pa. H.B. 2557, § 5304(b) and (d) (2026).

§ 823 Skill disclosure

(a) A covered device offering a skill-represented product shall display the return at optimal skill and the return at absent skill, each stated to one decimal place, in a single view reachable from the idle state by a single player action, in type not smaller than that used for the award schedule.

(b) The device shall not display one of the two figures without the other, and shall not permit a configuration in which one is suppressed.

(c) The device shall display the skill influence range in the same view.

(d) The device shall display, for each skill element, the median time to completion measured under § 815(e) and the value returned for completing it.

(e) A covered device offering a product classified as a nominal skill product under SBCGS-C § 106(g)(2) shall not display any statement that the outcome depends on the

skill of the player, and shall display the return at absent skill as the return to player required by § 824(a)(1).

§ 824 Other required display

(a) A covered device shall display, reachable from the idle state by a control identified on the primary display:

(1) the theoretical return to player for the configuration in operation, stated to one decimal place;

(2) the identity of the covered operator and the means of making a complaint under SBCGS-M § 306;

(3) the statement and telephone number required by SBCGS-M § 305(c); and

(4) the minimum age required by SBCGS-M § 401.

(b) Where a charitable representation is made, the device shall display the matters required by SBCGS-M § 503, reachable from the idle state by a control identified on the primary display.

(c) The device shall permit the values displayed under subsection (b) to be updated remotely and shall record each update under § 862.

§ 825 Presentation integrity

(a) A covered device shall not:

(1) present an outcome that is a net loss in a manner that represents it as a win, including by celebratory audio or visual feedback;

(2) present a losing outcome in a manner designed to appear to be a near win, including by displaying symbols adjacent to a winning combination with emphasis not applied to other losing outcomes;

(3) misrepresent the role of skill in determining outcome;

(4) represent that an award is available that the award schedule does not make available; or

(5) present a sequence that continues to display an outcome as undetermined after it has been determined, for a period longer than is necessary to present the outcome.

Basis: Pa. H.B. 2557, § 5306(a) (2026).

(b) Where the device presents an outcome that has been determined before the presentation begins, and the presentation permits a player action, the device shall not represent that the action affects the outcome.

(c) A covered device shall not present a virtual opponent without disclosing that the opponent is not a person, and shall not permit a virtual opponent to use information about the player's play that is not available to the player.

Basis: Ohio Admin. Code 3772-50-24 app. A, Game Outcome item 9; GLI-11 v3.0 § 4.20.5.

PART 830

AGE, IDENTITY, LIMIT, AND EXCLUSION ENFORCEMENT

§ 831 Verification before play

(a) A covered device shall not accept consideration until age has been verified by one of the methods in SBCGS-M § 401(b).

(b) Where verification is performed by reading an identification document, the device shall evaluate the document for validity and shall not accept a document that has expired.

(c) The device shall not retain an image of an identification document beyond the period necessary to perform the verification and to record the result, and shall record the result without retaining the document number where the jurisdiction permits.

(d) Where a jurisdiction permits limited anonymous play, the device shall enforce each condition in SBCGS-M § 401(d), shall meter sessions conducted under that subsection,

and shall refuse anonymous play once the proportion in SBCGS-M § 401(d)(4) is reached.

Basis: Pa. H.B. 2557, § 5303 (2026).

§ 832 Exclusion enforcement

(a) A covered device shall evaluate the identity established under § 831 against exclusion data before accepting consideration, and shall refuse play where the person is excluded.

(b) The device shall refuse play without displaying to any other person the reason for the refusal, and shall record the event under § 862.

(c) Exclusion data shall be current as of the most recent successful communication with the monitoring system, and § 805 applies where the data cannot be evaluated.

(d) A covered device shall permit an excluded person to redeem a balance held at the device.

(e) A covered device shall support enrollment in the exclusion program at the device, as required by SBCGS-M § 301(a)(1), shall transmit the enrollment to the monitoring system before the player leaves the device, and shall confirm transmission to the player.

§ 833 Limit enforcement

(a) A covered device shall enforce the limit set under SBCGS-M § 302 at the point at which consideration is committed, and shall refuse the commitment where accepting it would cause the limit to be exceeded.

(b) The device shall inform the player which limit caused the refusal and the amount remaining under it.

(c) A decrease in a limit shall take effect immediately. An increase shall take effect only after the period of the existing limit has expired and the player has reaffirmed the increase after that expiry.

(d) The device shall not permit a limit to be overridden by an employee of the covered operator or of the host location.

(e) Where a player has set limits of differing durations, the device shall apply the most restrictive applicable limit.

§ 834 Session pacing

(a) A covered device shall not accept consideration for a further play within five seconds of the commencement of the preceding play.

(b) A covered device shall suspend play for not less than thirty seconds after fifteen minutes of continuous play in a session, shall display the information required by § 822(b) during the suspension, and shall require a player action to resume.

(c) The device shall determine the end of a session as defined in SBCGS-M § 203 and shall record the session under § 861.

(d) A covered device shall not accept a credit card, a debit card, or an instrument drawn on a line of credit.

Basis: Pa. H.B. 2557, § 5304(a), (b), and (f) (2026).

PART 840

ACCOUNTING AND METERING

§ 841 Meters

(a) A covered device shall maintain cumulative meters, not resettable except as provided in subsection (d), for at least:

(1) amount committed;

(2) value of awards;

(3) number of plays;

(4) value in and value out by each means of transfer;

(5) skill events available, initiated, and completed, under § 816(c);

(6) sessions commenced, and sessions conducted under SBCGS-M § 401(d);

(7) commitments refused by a limit under § 833 and by an exclusion under § 832; and

(8) door openings, power interruptions, and configuration changes.

(b) A meter shall be maintained in critical memory, shall be of sufficient width that it does not roll over within the life of the device, and shall record a rollover where one occurs.

(c) A meter shall be displayable without opening the cabinet and shall be transmitted to the monitoring system.

(d) A meter shall not be reset except by a documented procedure that records the prior value, the new value, the individual, and the authorization.

Basis: 25 C.F.R. § 547.9; Minn. R. 7864.0235; Ohio Admin. Code 3772-50-24 app. A, Game Accounting.

§ 842 Awards and redemption

(a) A covered device shall not dispense cash.

(b) An award shall be delivered by a ticket, voucher, or electronic record that identifies the device, the date and time, the value, and a unique identifier, and that is validated against the monitoring system before redemption.

(c) A covered device shall not permit a balance to be transferred to another device except through the monitoring system, and shall record each transfer.

(d) A covered device shall permit a player to redeem the entire balance at any time in the idle state.

(e) Where a device permits a balance to be applied to further play, it shall permit the player to decline before the balance is applied, and shall record the election.

Basis: Ohio Admin. Code 3772-50-24 app. A, Game Accounting item 2; Pa. H.B. 2557, § 5302(b)(4) (2026).

§ 843 Computation of revenue and yield

(a) The monitoring system shall compute, for each covered device, each product, each host location, and each licensed organization, for any period:

(1) the amount committed;

(2) the value of awards;

(3) gross gaming revenue as defined in SBCGS-C § 103; and

(4) the actual return to player, compared with the theoretical return recorded for the configuration.

(b) Where a charitable representation is made, the monitoring system shall accept the deduction categories required by SBCGS-M § 502(b)(4), shall compute charitable yield as defined in SBCGS-C § 107(d), and shall retain the computation and its inputs.

(c) The system shall not permit an amount to be recorded as applied to a charitable purpose without identifying the beneficiary.

(d) The system shall make each computation under this section available for export in a machine readable format.

PART 850

MONITORING SYSTEM AND COMMUNICATIONS

§ 851 Connection

(a) A covered device shall communicate with a monitoring system under the control of the covered operator or of a regulatory authority.

(b) The device shall transmit each event within § 862 and each meter within § 841 not less often than every five minutes while in service, and shall transmit an event within § 805(b) immediately.

(c) The device shall queue transmissions that cannot be delivered and shall deliver them on restoration, without loss and without duplication.

(d) Where communication has been unavailable for more than twenty four hours, the device shall enter the state described in § 805(a).

Basis: Pa. H.B. 2557, § 5301 (2026); Minn. R. 7864.0235.

§ 852 Capabilities

(a) A monitoring system shall be capable of:

(1) recording every commitment, award, and session in real time;

(2) enforcing exclusion by distributing exclusion data to every covered device the operator offers, in every jurisdiction in which it operates;

(3) enforcing limits set under SBCGS-M § 302 across the devices at which a player plays, where identity is established;

(4) disabling a covered device remotely;

(5) verifying the software identification reported by each device against the identification recorded for it, and raising an alarm on a mismatch;

(6) receiving and aggregating the skill event records required by § 816 and computing the skill realization rate for any device, product, configuration, and period;

(7) computing the values required by § 843; and

(8) producing the reports required by SBCGS-M § 602.

(b) A monitoring system shall retain the records supporting each capability for not less than five years.

§ 853 Security of communications

(a) Communication between a covered device and a monitoring system shall be authenticated and encrypted using a published algorithm of current general acceptance, and shall protect against replay.

Basis: Minn. R. 7864.0235, which requires authentication and encryption employing the Advanced Encryption Standard; 25 C.F.R. § 547.15.

(b) A covered device and a monitoring system shall each authenticate the other before exchanging data.

(c) Access to a monitoring system shall be controlled by individual credentials, shall require a second factor for any account able to change a configuration, a limit, an exclusion record, or a meter, and shall be logged.

(d) A monitoring system shall be subject to a penetration test by a person independent of its developer and its operator, at intervals not exceeding twenty four months, and the report shall be retained and produced to an assessor on request.

§ 854 Remote disable

(a) A monitoring system shall permit a covered device to be disabled remotely, and shall record the individual, the time, and the reason.

(b) A device that has been disabled shall preserve any player balance and shall permit the player to redeem it.

(c) A device shall not be re-enabled except by a recorded action identifying the individual and the basis.

PART 860

RECORDS, LOGGING, AND RECONSTRUCTION

§ 861 Game recall

(a) A covered device shall retain information sufficient to reconstruct each of the fifty most recent plays and each of the ten most recent sessions, including for each play the amount committed, the outcome, the value returned, each player action, and each matter recorded under § 816.

(b) Recall information shall be presentable at the device in a form that permits a person to determine what occurred, and shall be exportable.

(c) Recall information relating to a play that is the subject of a complaint shall be preserved as required by SBCGS-M § 306(d).

Basis: GLI-11 v3.0 § 4.20.11.

§ 862 Event log

(a) A covered device shall log, with the date and time and the identity of any individual involved:

(1) each power interruption and each restoration;

(2) each door opening and closing;

(3) each configuration change, stating the prior and the new value;

(4) each software load and each verification under § 803(e);

(5) each meter reset under § 841(d);

(6) each entry into and exit from the state described in § 805(a), with the condition;

(7) each refusal under § 832 and § 833;

(8) each enrollment transmitted under § 832(e);

(9) each collection of proceeds; and

(10) each communication failure exceeding five minutes.

(b) The log shall retain not fewer than the most recent one thousand events of each type, or ninety days, whichever is greater, and shall be transmitted to the monitoring system.

(c) A log entry shall not be alterable or deletable at the device.

§ 863 Clock, retention, and production

(a) A covered device shall maintain a clock synchronized with the monitoring system to within one second, and shall record each synchronization that adjusts the clock by more than one second.

(b) Records required by this Part shall be retained by the monitoring system for not less than five years.

(c) Records shall be producible in a documented, machine readable format, and the covered operator shall publish the schema.

PART 870

SOFTWARE AND HARDWARE INTEGRITY

§ 871 Software identification and verification

(a) Each software component on which outcome, award value, accounting, a skill element, or a control required by this standard depends shall carry an identification that changes whenever the component changes.

(b) A covered device shall verify each such component against a stored value at power up and at intervals not exceeding twenty four hours, and shall enter the state described in § 805(a) on failure.

(c) The verification shall use a method that cannot be satisfied by a component that differs from the one examined by the test laboratory.

Basis: 25 C.F.R. §§ 547.8, 547.13; Ohio Admin. Code 3772-50-24 app. A, Software Verification.

§ 872 Critical memory

(a) A covered device shall maintain critical memory with a means of detecting corruption, and shall verify it at power up and at intervals not exceeding twenty four hours.

(b) On detection of corruption the device shall enter the state described in § 805(a), shall preserve what can be preserved, and shall record the event.

(c) Critical memory shall be preserved across a power interruption of not less than seventy two hours.

Basis: 25 C.F.R. § 547.10.

§ 873 Interruption and recovery

(a) After a program interruption, a covered device shall return to the state in which it was before the interruption, including the state of a play in progress and of any skill element in progress.

(b) Where the state of a skill element in progress cannot be restored, the device shall credit the player with the value that completion of the element would have returned, and shall record the event.

Basis: GLI-11 v3.0 § 4.20.12.

(c) A covered device shall not lose a player balance as a result of an interruption.

§ 874 Physical security

(a) A covered device shall secure, behind a locked mechanism with a sensor recorded under § 862(a)(2), the program storage, the currency acceptor and its container, and any component whose alteration would affect outcome, award value, or a meter.

(b) A covered device shall not present a physical hazard to a player.

Basis: Ohio Admin. Code 3772-50-24 app. A, Player Safety.

(c) A covered device shall accurately register valid currency and shall return currency it rejects, and shall accept currency only while enabled for play.

Basis: Ohio Admin. Code 3772-50-24 app. A, Credit Acceptance.

PART 880

TESTING AND CERTIFICATION

§ 881 Test laboratory

(a) A test laboratory performing work under this standard shall:

(1) be independent of the manufacturer, of the covered operator, of each host location, and of each licensed organization to which the work relates, and of every affiliate of each;

(2) not be compensated by reference to the outcome of the testing;

(3) hold accreditation to ISO/IEC 17025 for the testing of gaming devices, or an equivalent accreditation recognized by a gaming regulatory authority; and

(4) employ individuals with demonstrated competence in the statistical evaluation of game mathematics and in the examination of gaming device software.

(b) A test laboratory shall retain its working papers, the prototype software examined, and the data supporting each determination under Part 810, for not less than five years.

Basis: 25 C.F.R. § 547.5; Ohio Admin. Code 3772-50-25.

§ 882 Scope of testing

(a) Testing shall cover each requirement of this standard applicable to the covered device and, where the monitoring system is submitted, to that system.

(b) Testing shall be performed against the prototype in the hardware and software identification that will be deployed, and shall include:

(1) execution of test cases sufficient to determine each matter in Part 810;

(2) examination of source code for each component within § 871(a);

(3) verification of each meter in § 841 against executed play;

(4) verification of the fail-safe behavior in § 805 by inducing each condition in § 805(b);

(5) verification of the enforcement in Part 830 at the boundary, by committing consideration at the limit, one increment below it, and one increment above it; and

(6) verification that the instrumentation in § 816 records each field for each of an available, an initiated but abandoned, and a completed skill event.

§ 883 Contents of the report

A report shall state:

(a) the laboratory, its accreditation, and the individuals responsible;

(b) the covered device, the manufacturer, the model, and the software identification of each component examined;

(c) each configuration to which the report applies;

(d) each requirement tested, the test performed, and the result;

(e) the matters required by § 819;

(f) each requirement that was not tested and the reason;

(g) each deviation from this standard observed, and whether it was remedied before the report was issued; and

(h) the date of the report and the period for which it is valid under § 885.

§ 884 Retest

(a) A further certification is required upon:

(1) a change to a component within § 871(a);

(2) a change to a configuration that affects the cost of a play, the award schedule, the theoretical return, or a skill element;

(3) a change to the monitoring system affecting a capability in § 852;

(4) the addition of a skill element, or the removal or disabling of one; and

(5) any event requiring reclassification under SBCGS-C § 109(a)(1).

(b) A change within subsection (a)(2) that does not affect a skill element may be certified by a report limited to the affected matters, which shall identify the report it supplements.

§ 885 Certificate and term

(a) A certification is valid for the configuration and the software identification stated in the report, for a period not exceeding thirty six months, and thereafter until a further report is issued if one has been requested before expiry.

(b) A covered operator shall not represent that a covered device is certified other than by reference to a report meeting § 883.

(c) A certification under this standard is not an approval by a regulatory authority and shall not be presented as one.

APPENDIX A

TEST CASES FOR PART 810

The following test cases are illustrative of what a report under § 883 is expected to record. They are not exhaustive and a laboratory remains responsible for designing tests sufficient to support its conclusions.

REQUIREMENT	TEST	EXPECTED RESULT
§ 812	Simulate ten million plays under the optimal strategy at the minimum and the maximum amount that may be committed	Return stated to one decimal pla confidence interval half width r exceeding 0.1 percentage points
§ 813	Repeat under the null strategy, taking no action where the product advances without one, and the least effortful action where it does not	Return stated on the same basis, null strategy described
§ 814	Subtract	Skill influence range, reported each amount
§ 815(b)	From the idle state, request the rules of play; read them	Rules state the existence of the skill element, how it is reached what the player does, and what t player receives
§ 815(c)	Attempt to reach the skill element using only what the device presents	Element reached
§ 815(d)(2)	Produce a play on which the element becomes available; measure the period for which the prompt remains actionable and the period for which a further play may be committed	Prompt period not shorter than t greater of fifteen seconds or th commit period
§ 815(e)	Execute the skill element under the optimal strategy thirty times, and a base play thirty times; take the medians	Skill time cost ratio not exceed twenty, both medians stated in seconds

REQUIREMENT	TEST	EXPECTED RESULT
§ 816	Produce one available, one initiated and abandoned, and one completed skill event; export the records	Each field in § 816(a) populated correctly for each of the three
§ 817(b)	Instrument the RNG interface; execute one hundred skill elements	No RNG consultation between the start of the element and the determination of its success
§ 818(a)	Execute two hundred plays completing every skill element, then two hundred completing none; compare availability, difficulty, and value	No difference outside sampling variation
§ 818(c)	Compare the value returned for completing the element with the value returned for not completing it	Completion returns more
§ 818(d)	Identify each player input in the play sequence; for each, execute the play holding all else constant with the input made and not made	Every input represented as a ski element changes the value returr
§ 818(f)	Record the screen position and timing of the skill prompt and of the control that commits a further play	Prompt does not occupy the posit the commit control occupies with two seconds
§ 818(h)	Count player actions from the availability of the element to its commencement	Not more than three

APPENDIX B

MATTERS ON WHICH COMMENT IS INVITED

1. **The simulation requirements in § 812(c).** Ten million plays per configuration and a confidence interval half width of one tenth of one percentage point. Comment is invited on whether these are attainable at reasonable cost for a small manufacturer, and on whether a tiered requirement keyed to the size of the skill influence range would be preferable.
2. **The null strategy in § 813(b).** The definition determines the whole of the measurement, and the Institute is aware that it can be contested for products in

which the player must act for the play to resolve at all. Comment is invited on paragraph (b)(2) in particular, and on whether a second figure computed under a strategy representing an average uninstructed player would be more useful than the two extremes.

3. **The skill time cost ratio in § 815(e).** Twenty. Comment is invited on the figure and on whether the measure should instead be stated as value returned per unit of time, which is closer to what a player experiences.

4. **Instrumentation in § 816.** Comment is invited from manufacturers on the cost of recording and transmitting the six fields, and on whether any of them cannot be captured on existing hardware.

5. **The prohibitions in § 818.** Comment is invited on whether any of them would prohibit a design that is legitimate, in particular subsection (g), which prevents a device from withdrawing a skill element from a player who has used it successfully.

6. **The five minute transmission interval in § 851(b) and the twenty four hour tolerance in § 851(d).** Comment is invited from operators in areas with limited connectivity.

7. **Laboratory accreditation in § 881(a)(3).** The standard requires ISO/IEC 17025 accreditation for gaming device testing or an equivalent recognized by a gaming regulatory authority. Comment is invited on whether a jurisdiction that today accepts amusement device testing should be permitted a transition period.

8. **Products delivered other than by a dedicated device.** This standard assumes a device in a host location. Comment is invited on what would have to change for a covered product delivered through a personal mobile application under charitable gaming authority, in particular in Parts 830 and 870.

End of SBCGS-T Version 1.0 Working Draft.

Institute for Emerging Gaming Markets
A standards body under Aevora Solutions LLC
Charleston, South Carolina
iegm.org