INDEPENDENT
GAMBLING CONTROL
OFFICE

TGS2

Technical Gaming Standard for Progressive Gaming Devices in Casinos

Version 2.0 – April 13, 2026

BRITISH COLUMBIA

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1. Overview

1.1 Introduction

1.1.1 Purpose

This Technical Gaming Standard (standard) outlines requirements for progressive gaming devices including requirements:

a) for testing devices;
b) that devices must meet to receive approval from the Independent Gambling Control Office (IGCO) for use in a lottery scheme; and
c) for the operation of lottery schemes using approved devices.

1.1.2 Changes from Previous Version of this Standard

This standard replaces version 1.3 of B.C.'s TGS2 - Technical Gaming Standards for Progressive Gaming Devices in Gaming Venues. This version includes updates required to:

a) align the standard with the new B.C. *Gaming Control Act* and regulations that came into force on April 13, 2026;
b) reflect the renaming of the Gaming Policy and Enforcement Branch (GPEB) as the IGCO; and
c) improve the clarity and consistency of language used within the standard.

1.1.3 Progressive Gaming Device Defined

A Progressive Gaming Device is a gaming device that has an increasing jackpot, based on a function of credits that are bet. This includes games that award progressive jackpots or a 'pool' based on criteria other than obtaining winning symbols on the machine, such as 'Mystery Jackpot.' However, this does not include games that incorporate a bonus feature as part of the game theme, which offers awards that increase as the game is played and, as well, is not configurable.

Note: A "Progressive Gaming Device" does NOT include, for purposes of this standard, ancillary electronic equipment used in the conduct of Table Games.

1.1.4 Application of Standard

This standard applies to the following types of progressive gaming devices:

a) Stand-Alone Progressive Gaming Devices. A stand-alone progressive gaming device is a single progressive game that is not a part of a link;
b) Multiple Gaming Device (Linked) Progressives. A 'linked progressive' is one or more Electronic Gaming Devices (EGDs) that offer a common progressive jackpot(s) which are linked to a progressive controller within a single gaming venue; and
c) Multi-Site Progressive Gaming Devices. Multi-site progressive gaming devices are interconnected in more than one gaming venue. The purpose of a multi-site progressive gaming device is to offer common progressive jackpot(s) (system jackpot) at all participating locations.

Chapters 1, 2, and 3 of this standard apply to all types of progressive gaming devices**.** Chapter 4 only applies to multi-site progressive gaming devices.

1.1.5 Other Technical Gaming Standards That May Apply

Depending upon the technology used by a system or device, the following standards may also apply:

a) TGS1 – Technical Gaming Standard for Gaming Devices in Casinos; and/or
b) TGS3 – Technical Gaming Standard for On-line Monitoring and Control Systems and Validation Systems in Casinos.

1.1.6 Conflict with Legislation or Regulation

In the event of a conflict between this standard and the provisions of the *Gaming Control Act*, its regulations, or any other applicable legislation or regulation, the legislation or regulation applies.

2. Progressive Component Requirements

2.1 Hardware and Player Safety

2.1.1 General Statement

Electrical and mechanical parts and design principals of the progressive gaming device must not subject a player to any physical hazards. It is the responsibility of the manufacturer of the device to obtain the appropriate Underwriters Laboratory (UL) / Canadian Standards Association (CSA) certification.

2.2 Environmental Effects on Progressive Integrity

2.2.1 Game Integrity Standard

British Columbia Lottery Corporation (BCLC) and/or an Independent Testing Laboratory (ITL) must perform tests to determine whether outside influences affect game fairness to the player or create cheating opportunities. A progressive gaming device must be able to withstand the following tests, resuming game play without operator intervention:

a) Electro-magnetic Interference. Progressive gaming devices must not create electronic noise that affects the integrity or fairness of the neighbouring associated equipment.
b) Electro-static Interference. Protection against static discharges requires that the progressive gaming device's hardware be earthed in such a way that static discharge energy can not damage or inhibit the normal operation of the electronics or other components within the progressive gaming device. Progressive gaming devices may exhibit temporary disruption when subjected to a significant electro-static discharge greater than human body discharge, but they must exhibit a capacity to recover and complete any interrupted function without loss or corruption of any control or data information associated with the progressive gaming device. The tests will be conducted with a severity level of up to 40KV air discharge.
c) Radio Frequency Interference (RFI). Progressive gaming devices must not divert from normal operation by the application of RFI at a frequency range from 27 to 1000 MHZ with a field strength of 3 volts per meter (Note: This rule may be waived where the mode of communication of the part being tested is via radio frequency transmission).
d) Magnetic Interference. Progressive gaming devices must not be adversely affected by Magnetic Interference. The manufacturer must supply any documentation if the progressive gaming device has had Magnetic Interference testing against any recognized standard.

2.3 Progressive Meter/Display Requirements

2.3.1 General Statement

One or more progressive gaming device(s) must be linked, directly or indirectly, to a mechanical, electrical, or electronic device, including the video display, if applicable, that shows the payoff which increments at a set rate of progression as credits are wagered. This device is the Progressive Meter. For games that have progressives such as 'Mystery Jackpot', the payoff does not have to be displayed to the player, although there should be an indication as to this type of feature on the game.

2.3.2 Progressive Displays

a) A progressive meter must be visible to all players who are playing a progressive gaming device, which may potentially win the progressive amount if the progressive jackpot combination appears, except for 'mystery jackpots.' A player must know that the player is playing a progressive game and not have to play the max bet amount to find out. The above are parameters that must be verified on-site prior to implementation.

b) A progressive meter must display the current total of the progressive jackpot in the monetary value or credits (the monetary value may vary for Multi-Site Progressive Displays.) Because the polling cycle does cause a delay, the jackpot meter need not precisely show the actual monies in the progressive pool at each instance (see also Section 2.3.3 below). This requirement does not apply to 'Mystery Jackpots.'

Note: Any EGD that has a feature that doubles, or triples, etc. any win must have a sign that states the progressive award will not be doubled or tripled if won during the feature, if this is the intention.

2.3.3 Types of Updating Displays

The use of odometer and other "paced" updating displays is allowed. A progressive meter must display the winning value within 30 seconds of the jackpot being recognized by the central progressive computer system. In the case of paced updating displays, the system jackpot meter must display the winning value after the jackpot broadcast is received from the central progressive computer system. Working together with BCLC, the IGCO will set the rule for the length of time allowed before the progressive must shut down.

2.3.4 Progressive Display Digital Limitations

If a progressive meter progresses to its maximum display amount, the meter must freeze and remain at the maximum value until awarded to a player. This can be avoided by setting the jackpot limit in accordance with the digital limitations of the sign.

2.3.5 Alternating Displays

Where multiple items of information must be displayed on an EGD or progressive meter, it is sufficient to have the information displayed in an alternating fashion.

2.4 Progressive Controller Requirements

2.4.1 General Statement

The requirements of this section apply equally to one progressive gaming device that is linked to a progressive controller or is internally controlled, as well as several progressive gaming devices linked to one progressive controller within one gaming venue or multiple gaming venues.

2.4.2 Progressive Controller Description

A progressive controller is all of the hardware and software that controls all communications among the EGDs that calculates the values of the progressives and displays the information within a progressive gaming device link (if applicable – progressive gaming device(s) may be internally controlled) and the associated progressive meter. This equipment includes but is not limited to Personal Computer (PC)-based computers, wiring, and collection nodes, etc.

2.4.3 Setting the Jackpot Amounts

The method by which system jackpot parameter values are modified or entered must be secure. All progressive gaming devices or any approved progressive system component must display, upon request, the following information for each progressive prize offered (if applicable):

a) CURRENT VALUE: current prize amount;
b) OVERFLOW: amount exceeding limit;
c) HITS: number of times this progressive was won;
d) WINS: total value of wins for this progressive or a history of the last 25 progressive hits;
e) BASE: starting value;
f) LIMIT: jackpot limit value (if the Jackpot is capped at a maximum limit, this standard does not require to add the overflow amounts to the next starting value and will be determined on a venue-by-venue basis);
g) INCREMENT: percentage increment rate;
h) SECONDARY INCREMENT: percentage increment rate after limit is reached;
i) HIDDEN INCREMENT: percentage increment rate for the reserve pool (the next base amount must be computed or posted to advise the player of this contribution);
j) RESET VALUE: the amount the progressive resets to after the progressive is won; and
k) The participating EGDs.

2.4.4 Progressive Controller Program Interruption

After a program interruption (e.g. power down), the software must be able to recover to the state it was in immediately prior to the interruption occurring.

2.4.5 Progressive Resumption

On program resumption, the following procedures must be performed at a minimum:

a) Any communications to an external device must not begin until the program resumption routine, including self-tests, is completed successfully;
b) Progressive gaming device control programs must test themselves for possible corruption due to failure of the program storage media. The authentication may use the checksum; however, it is preferred that the Cyclic Redundancy Check (CRC) calculations are used as a minimum (at least 16 bit). Other test methodologies may be acceptable if at a comparable level of integrity; and
c) The integrity of all critical memory must be checked.

2.4.6 Communications for Signalling of a Jackpot

There must be a secure, two-way communication protocol between the main game processor board and progressive. In addition, the progressive must be able to:

a) Send to the EGD the amount that was won for metering purposes; and
b) Constantly update the progressive display as play on the link is continued.

2.4.7 Monitoring of Credits Bet

During the 'Normal Mode' of progressive gaming devices, the progressive controller must continuously monitor each device on the link for credits bet and must multiply the same by the rate of progression and denomination in order to determine the correct amounts to apply to the progressive jackpot. This must be 99.99% accurate.

2.4.8 Access to the Progressive Controller

Each progressive controller used with a progressive gaming device must be housed in a secure environment allowing only authorized accessibility. Access to the controller must conform to BCLC Internal Control procedures and any applicable requirements under the IGCO General Manager's Security and Surveillance Regulation.

2.4.9 Progressive Controller Required Meters

The progressive controller or other approved progressive gaming device component must keep the following information in non-volatile memory, which must be displayed on demand. Additionally, meters must be 99.99% accurate.

a) The number of progressive jackpots won on each progressive level if the progressive display has more than one winning amount;
b) The cumulative amounts paid on each progressive level if the progressive display has more than one winning amount;
c) The maximum amount of the progressive payout for each level displayed;
d) The minimum amount of the progressive payout for each level displayed; and
e) The rate of progression for each level displayed.

2.4.10 Controller and Display Functions during Progressive Jackpot Win

When a progressive jackpot is recorded on an EGD which is attached to the progressive controller, the progressive controller must allow for the following to occur on the device and/or progressive display:

a) Display of the winning amount;
b) Display of the EGD identification that caused the progressive meter to activate if more than one EGD is attached to the controller;
c) Automatic reset to the reset amount and continue normal play; and
d) Display the new progressive values that are current on the link.

2.4.11 Progressive Jackpot Amount

The initial amount of a progressive jackpot must begin at or above an award for that particular EGD that makes the entire meter payout greater than the minimum percentage requirement (see also Section 4.9.1 Software Requirements for Percentage Payout in TGS1 – Technical Gaming Standard for Gaming Devices in Casinos).

2.4.12 Progressive Controller Error Conditions

When a controller error occurs, it is preferred that it alternates the displays, or equivalent, between the current amount and an appropriate error message that is visible to all players, or can alert the gaming venue to the error condition. If any of the following events occur, the game that is using the progressive must be disabled, and an error must be displayed on the progressive meter, other approved progressive system component or EGD:

a) During a 'communication failure' (see also Section 3.2.8 Communication Failure);

b) When there have been multiple communication errors;
c) When a controller checksum or signature has failure;
d) When a controller's RAM or PSD (program storage device) mismatch or failure occurs;
e) When the current amount is larger than the limit (see also Section 2.4.14 Jackpot Limits);
f) When the jackpot configuration is lost or is not set;
g) If there has been an unreasonable amount of credits bet (an unreasonable amount of credits bet is defined by the progressive set up which is based on the number of bets and number of machines); or
h) If the game meters are validated against the controller's meters (via communications between the game board and controller) and they do not reconcile.

2.4.13 Transferring of Progressive Jackpot

The progressive controller must have a secure means of transferring a progressive jackpot and/or prizes to another progressive controller or other approved progressive gaming device component. Transferring of progressive jackpots must meet BCLC Internal Control Procedures.

2.4.14 Jackpot Limits

The controller may be configured with a limit on the jackpot of a progressive gaming device, if the limit imposed is greater than the jackpot payout on the progressive gaming device at the time the limit is imposed. This limit must be posted on or near the device or devices to which the limit applies.

2.4.15 Time Limits

The progressive controller may have the ability to set time limits that limit the time the progressive is available.

2.5 Progressive Jackpots

2.5.1 General Statement

A Progressive Jackpot is an award for a winning or non-winning (e.g. mystery jackpot) play of the game, as defined in Section 1.1.3 Progressive Gaming Device Defined. A bonus game where certain circumstances are required to be satisfied, prior to awarding a fixed bonus prize, is not a progressive gaming device and is not subject to these requirements.

2.5.2 Swapping Progressive Levels

For progressives offering multiple levels of awards, the player must always be paid the higher progressive amount, if a particular combination is won that should trigger the higher paying award. This may occur when a winning combination may be evaluated as more than one of the available paytable combinations (i.e., a Flush is a form of a Straight Flush and a Straight Flush is a form of a Royal Flush). Therefore, there may be situations where the progressive levels must be swapped to ensure the player is being awarded the highest possible progressive value based on all combinations the outcome may be defined as.

2.5.3 EGD Requirements when any Progressive is Awarded

When a progressive prize has been awarded, the EGD or other approved progressive component must do the following:

a) An appropriate message must be displayed;
b) Unless the prize is transferred to the player's credit meter, the software and game must lockup

until the award has been paid by the attendant;

c) All progressive related meters must be updated (see also Section 4.10.7 Electronic Accounting and Occurrence Meters of TGS1 – Technical Gaming Standard for Gaming Devices in Casinos); and
d) In the case of a player winning a 'Mystery Jackpot', there must be a light or an alarm so the player doesn't abandon the machine, not knowing they've won an award.

2.5.4 Progressive Gaming Device Metering Requirements

The EGD must update its electronic meters to reflect the winning progressive jackpot amount consistent with these procedures and the electronic accounting meter requirements in Chapter 5 of TGS1 – Technical Gaming Standard for Gaming Devices in Casinos. Progressive wins may be added to the credit meter if:

a) The credit meter is maintained in monetary value or credits;
b) The progressive meter is incremented to whole credit amounts; or
c) The prize, in monetary value, is converted to credits on transfer to the player's credit meter in a manner that does not mislead the player. The conversion from monetary value to credits must always round up.

Note: All winners of jackpots in excess of $9,999.99, in gaming venues in British Columbia, are required under the Proceeds of Crime (Money Laundering) and Terrorist Financing Act/Regulations to complete a Large Cash Transaction and Foreign Exchange Record (LCTR) at the time of the win.

2.6 Progressive Awards Paid Over Time

2.6.1 Notice of Payment Over Time

An EGD which offers a progressive award paid over time must comply with the display and sign requirements, as well as BCLC Internal Control Procedures, except that the display or sign need not include the cash equivalent value. In addition, clear and conspicuous notice of the following must be provided to all players:

a) That the displayed jackpot will be paid over time and not in one lump sum; and
b) The period of time covering the payments.

2.7 Progressive Percentage Requirements and Odds

2.7.1 General Statement

The requirements within this section do not supersede the Percentage Return to Player (%RTP) and Odds rules outlined in TGS1 – Technical Gaming Standard for Gaming Devices in Casinos.

2.7.2 Linked Gaming Device Odds

Each device on the link must have the same probability of winning the progressive, adjusted for the denomination played. For instance, the probability must remain the same for multiple denomination games based on the monetary value of the wager (e.g., A two coin $1 game has the probability of one in 10,000 and a two coin, $2 game on the same link has the probability one in 20,000).

3. Multiple Site Progressive Requirements

3.1 Multi-Site Central Progressive Computer System Requirements

3.1.1 General Statement

Any Gaming Services Provider seeking approval to participate in a Multi-site progressive slot system must adhere to BCLC Internal Control Procedures.

3.1.2 Location of Central Progressive Computer System

An office containing a central progressive computer system must be equipped with a surveillance system that meets BCLC Internal Control Procedures and any applicable requirements under the IGCO General Manager's Security and Surveillance Regulation.

3.1.3 Method of Communication for Multi-Site Gaming Devices

The method of communication must be a non-shared, dedicated line or equivalent. Dial-tone systems may be used as long as devices at the local site can't be disabled from another outside line or manipulated by any other means. When the method of communication is a shared line, appropriate encryption and security must be in place to avoid corruption or compromise of data.

3.1.4 Data Collection Requirement

Multi-site systems must communicate security information and the amounts wagered from each participating progressive gaming device to the central progressive computer system at least once every 15 seconds for terrestrial lines (dedicated phone lines), and in a reasonable amount of time for Radio Frequency.

3.1.5 Multi-Site Encryption Method

All multi-site systems must utilize an encryption method that has been approved by both BCLC and the IGCO. The encryption method must include the use of different encryption "keys" or "seeds" so that encryption can be changed in real-time.

3.1.6 Multi-Site Monitoring and Other On-Line System Requirements

The on-line provision must be able to monitor the meter readings and error events of each participating progressive gaming device regardless of any outside Monitoring and Control System (MCS). Therefore, the on-line security system requirement when progressive gaming devices are in play is not altered in any way.

3.1.7 Central Progressive Computer System Power Supply

The central progressive computer system site must be equipped with non-interruptible power supply that will allow the central progressive computer system to conduct an orderly shut down if the power is lost. Should the system utilize hard disk peripherals, the central progressive computer system must be capable of on-line data redundancy.

3.1.8 Communication Failure

An EGD must disable itself and suspend play if communication is lost to the local collection unit and security hub. The EGD may resume play only when communication to the local hub is restored. If the communication is lost between the local hub and the central progressive computer system, the EGD may continue to play. However, once communications are re-established, the system wide totals

must be updated. Notwithstanding this requirement, if the communication is lost for more than 24 hours, the site must be shut down.

3.1.9 Central Progressive Computer System Required Reports

A multi-site system must supply, as requested, the following reports:

a) PROGRESSIVE SUMMARY: A report indicating the amount of, and basis for, the current jackpot amount (the amount currently in play);
b) AGGREGATE REPORT: A report indicating the balancing of the system with regard to system wide totals; and
c) PAYOFF REPORT: A report that will clearly demonstrate the method of arriving at the payoff amount. This will include the credits contributed beginning at the polling cycle, immediately following the previous jackpot and will include all credits contributed up to and including the polling cycle which includes the jackpot signal.

Note: Credits contributed to the system after the jackpot occurs in real-time, but during the same polling cycle, are deemed to have been contributed to the progressive amount prior to the jackpot. Credits contributed to the system subsequent to the jackpot message being received, as well as credits contributed to the system before the jackpot message is received by the system, but registered after the jackpot message is received at the system, are deemed to have been contributed to the progressive amount of the next jackpot, if applicable.

3.1.10 Multi-Site System Meter Readings

All meter reading data must be obtained in real time in an on-line, automated fashion. Manual reading of meter values is not allowed. When requested to do so, the system must return meter readings on all EGDs attached to the system. The meter readings must be identical to the meter information retained in the EGD accounting meters. The meter, in either credit or monetary value, required is as follows:

a) Credits Bet must be defined as all amounts wagered.

Note: The purpose of the above credits bet meter reading is to verify and compare the progressive amount(s) in conjunction with the rate of progression.

3.1.11 Multi-Site System Door Monitoring

A multi-site system must have the ability to monitor entry into the front door of the progressive gaming device and report it to the MCS IMMEDIATELY.

3.1.12 Jackpot Win during Poll Cycle

If a jackpot is recognized in the middle of a System-Wide Poll Cycle, the overhead display may contain a value less than the aggregated jackpot amount calculated by the central progressive computer system. The credit values from the remaining portion of the poll cycle will be received by the central progressive computer system but not the local site, in which case the jackpot amount paid will always be the higher of the two reporting amounts.

3.2 Multi-Site Progressive Procedures

3.2.1 General Statement

Procedures must be developed, implemented and documented for the following. These reports must adequately document the procedures, be generated and retained:

a) Reconciliation of meters and jackpot payouts;
b) Collection drop of EGD funds;
c) Jackpot verification and payment procedures as set forth in BCLC Internal Control procedures;
d) System maintenance;
e) System accuracy;
f) System security;
g) System failures including:
    i. The local hub;
    ii. The central progressive computer system;
    iii. Failures in communications; and
    iv. Backup and recovery.

3.3 Multi-Site Jackpots

3.3.1 Multiple Jackpots during the Same Polling Cycle

When multiple jackpots occur, where there is no definitive way of knowing which jackpot occurred first, they will be deemed to have occurred simultaneously; and therefore, the gaming venue must follow procedures for payment of the jackpot as set forth in BCLC Internal Control procedures. In addition, if there is a communication failure as described in Section 3.1.8 Communication Failure, a winning player wagering at a non-updated site may also be eligible to a jackpot amount.