# Minimum Technical Requirements for Linked Jackpot Systems (Casino) Consultation version 2016

**Table of Contents**

[Explanatory note 3](#_Toc451947343)

[1 Introduction 4](#_Toc451947344)

[2 Testing 4](#_Toc451947345)

[3 Secretary to Approve Jackpots 4](#_Toc451947346)

[4 Applications for new and innovative technology 5](#_Toc451947347)

[5 All Jackpots to be Downloadable 5](#_Toc451947348)

[6 Linked Progressive Jackpot System 5](#_Toc451947349)

[7 Progressive Jackpot Trigger Operation 6](#_Toc451947350)

[8 Player Fairness 7](#_Toc451947351)

[9 Jackpot Contributions 8](#_Toc451947352)

[10 Walk-aways 8](#_Toc451947353)

[11 Protocol Requirements 8](#_Toc451947354)

[12 Jackpot System Equipment – Hardware and software 11](#_Toc451947355)

[13 Jackpot Shutdown 12](#_Toc451947356)

[14 Jackpot Update and Display 12](#_Toc451947357)

[15 Jackpot Win Notification and Reset 13](#_Toc451947358)

[16 Master and Slave Jackpot Controllers 14](#_Toc451947359)

[17 Jackpot Parameters 14](#_Toc451947360)

[18 Simultaneous Jackpot Winners 15](#_Toc451947361)

[19 Jackpot Audit and Event Data 16](#_Toc451947362)

[20 Critical Memory Error Detection 17](#_Toc451947363)

[21 Jackpot Supplementary Monetary Prize 18](#_Toc451947364)

### Explanatory note

The Secretary for Internal Affairs (Secretary) may prescribe minimum standards for gambling equipment under section 372 of the Gambling Act 2003.

This document forms part of the minimum standard prescribed by the Secretary for casino gambling equipment, in regards to linked jackpot systems for electronic gaming matching. Other documents also form part of the minimum standard, including the Australia New Zealand Gaming Machine National Standard 2015 and the New Zealand Casino Gaming Machine Appendix to the Australia New Zealand Gaming Machine National Standard 2015.

### 1 Introduction

1.1 This minimum standard applies to all new casino jackpot systems.

1.2 These requirements apply to integrated and external jackpot controllers as applicable. For example, where an integrated jackpot controller is used, many of the hardware and software requirements such as logic areas, critical memory and RAM clear are not applicable.

1.3 All external jackpot controllers must communicate on a real-time basis to the Casino Electronic Monitoring System (“CEMS”) and report full details of any jackpot wins and jackpot payments. The CEMS must also be able to get all the relevant meters from all the external controllers at the ‘end of day’ for correct financial reporting.

1.4 For the purposes of actual operation of a jackpot system, communication of amounts, unreasonable tests, event recording and auditing unless stated otherwise, the specific source wager and/or the actual ‘percentage contribution’ are interchangeable providing it is clear which value is used.

1.5 In this document:

(a) “Minimum Standard” means the Gambling Act (Casino Gambling Equipment) Minimum Standard 2004; and

(b) “Secretary” means the Secretary for Internal Affairs.

1.6 This document must be read with the other documents forming part of the Minimum Standard.

### 2 Testing

2.1 Where, in the opinion of a gaming machine tester, a jackpot system does not comply with the requirements of this document or any other requirement of the Minimum Standard, the gaming machine tester must seek direction from the Secretary.

2.2 Non-compliance with this document or any other requirement of the Minimum Standard must be reported to the Secretary.

### 3 Secretary to Approve Jackpots

3.1 All jackpot systems including the range of parameter values for each configurable parameter must be approved by the Secretary for Internal Affairs. (Note: casino operators can configure any parameter within the range of parameter values approved.)

### 4 Applications for new and innovative technology

4.1 Any matters of design, manufacture, and performance of casino gambling equipment that are not specifically addressed in the Minimum Standard will be considered by the Secretary as part of the approval process. For avoidance of doubt, this applies to (but is not limited to) situations where innovative use is being made of existing features, or where the existing Minimum Standard is silent on whether a particular feature is permitted.

4.2 In considering an application under standard 4.1, the Secretary may take into account matters of harm minimisation and prevention, and may decline an application due to matters of harm minimisation and prevention.

4.3 The Secretary may amend the Minimum Standard as a result of an application involving features not addressed in the Minimum Standard.

**Note:**  Manufacturers and vendors of gambling equipment are encouraged to contact the Department of Internal Affairs in the course of developing new or innovative technology and features, in order to ensure compliance with the Minimum Standard and in order that any necessary amendments to the Minimum Standard may be made in advance of the equipment being submitted.

### 5 All Jackpots to be Downloadable

5.1 The jackpot prize win amount must be downloaded electronically to the winning gaming machine’s credit meter unless:

(a) The jackpot win is for a merchandise prize (e.g. a car); or

(b) The prize is of a value that a casino operator as part of its audit and control requirements for a large jackpot win considers should be a hand pay and it is not possible to download the prize directly to a gaming machine and immediately force the gaming machine into a hand pay condition.

5.2 Any prize amount that will not be downloaded direct to a gaming machine must be notified to a player in the jackpot rules or display.

### 6 Linked Progressive Jackpot System

6.1 A linked progressive jackpot is an arrangement where two or more gaming machines within a single casino:

(a) are linked electronically to a jackpot controller device or system for the purpose of play on a progressive jackpot; and

(b) contribute a fixed equal increment percentage (contribution) of single game play turnover to the jackpot prize pool; and

(c) contribute equally to a player’s chance of winning the jackpot prize pool during game play.

6.2 A linked gaming machine that is not contributing to a jackpot is not eligible to win the jackpot and:

(a) may remain in play provided carded game RTP is independent of linked jackpot RTP; and

(b) where a gaming machine remains in play without contributing to the jackpot, a notice must be displayed advising players that the gaming machine is no longer contributing and/or able to win the jackpot.

6.3 The outcome of a jackpot prize win or loss must not be determined until a valid bet/contribution has been received by the jackpot controller.

6.4 The total effective increment percentage of a jackpot prize pool is the total of:

(i) the fixed increment percentage of contributions from the turnover of a gaming machine linked to the jackpot; and

(ii) where the jackpot start-up value is greater than $0, a percentage amount required to fund the preset start-up value; or

(iii) if the preset start-up amount is a fixed or variable amount funded from a hidden reserve, the percentage amount required to fund the reserve.

6.5 A ‘jackpot level’ is each separate pool in which a jackpot prize can be won as the result of play on a linked gaming machine.

6.6 Jackpot systems may have one or more jackpot levels that comprise an approved jackpot parameter set.

6.7 The increment percentage must be expressed to a number of decimal places that corresponds to the value actually used by the jackpot controller in calculating the available jackpot pool as a percentage of gaming machine turnover.

6.8 Each jackpot level must have its own jackpot prize pool parameter values comprising gaming machine contribution increment rate, preset start-up value and preset maximum win value (ceiling).

### 7 Progressive Jackpot Trigger Operation

7.1 A jackpot prize may only be triggered:

(a) for a Symbol Triggered jackpot, by a random occurrence of a specified game play outcome of a single game play on a gaming machine (e.g. five of a kind); or

(b) for a Mystery Triggered jackpot, by a random mystery trigger event (e.g. a gaming machine turnover contribution that when added to the current jackpot pool causes its value to equal or exceed a hidden randomly selected mystery trigger value that lies between the preset start-up amount and the preset maximum pool value); and

(c) by a software based pseudo random number generator (“RNG”). The RNG algorithm must be in accordance with the RNG requirements of the Australia New Zealand Gaming Machine National Standard.

7.2 The randomly selected mystery trigger value must be chosen and stored using a method where the chosen value cannot be accessed and used other than for the purpose of jackpot trigger determination.

7.3 The chance of winning a jackpot prize by a single game play on any linked gaming machine must:

(a) be in proportion to its contribution to the jackpot; and

(b) be an equal chance of winning the jackpot at all times when equal amounts are contributed.

7.4 A jackpot prize must not be triggered as a result of a component of skill.

### 8 Player Fairness

8.1 It is acceptable for a player’s chance of winning to be passed on to the next play of the same gaming machine providing that all players have an equal chance of benefiting from this behaviour (e.g. due to minimum gaming machine turnover contributions assimilation to the jackpot pool).

8.2 A jackpot prize must not be offered at any time when it cannot be won. For example, if there is a hardware or communication failure of the jackpot system, it must be clear that the jackpot is shut down and unavailable.

8.3 The following applies to symbol triggered progressive jackpots:

(a) if jackpot contributions exceed the jackpot ceiling value on any current jackpot, then all subsequent contributions received once that ceiling is reached are to be credited to an overflow meter;

(b) the overflow meter amount must be automatically transferred to the next jackpot pool or pools directly after the current jackpot is won providing the amount transferred does not cause the next jackpot pool to exceed the set ceiling amount for that pool;

(c) the choice of start-up value combined with play at any wager and number of lines must not cause the overflow pool to exceed a value which would not be reasonably expected, as shown by theoretical calculation and/or simulation, to be paid out during the lifetime of a jackpot; and

(d) jackpot systems must display what happens to overflow contributions. For example, jackpot artwork or notices may contain the statement: “Once the jackpot pool maximum level is reached, additional contributions are carried over to the next jackpot pool(s)”.

### 9 Jackpot Contributions

9.1 All contributions to a jackpot must be returned to the players as wins except upon jackpot decommissioning or a failure of the jackpot system to operate correctly.

9.2 All contributions received once a jackpot pool has triggered must be applied to the next jackpot pool. Contributions must not be lost while the jackpot system processes a jackpot win.

### 10 Walk-aways

10.1 A ‘walk-away’ occurs when a jackpot prize is awarded to a gaming machine with no player in attendance or if a player mistakenly leaves the gaming machine not realising they have won a jackpot.

10.2 The ‘walk-away period’ is defined as the period of time starting the instant a play is completed that results in the player credit meter going to zero, until the time the gaming machine is awarded and displays to the player any jackpot prize which may occur as a result of the last play contribution.

10.3 Where walk-away is possible, the jackpot system’s (including the linked gaming machines’) design and performance must:

(a) minimise the walk-away period;

(b) not have a walk-away period that exceeds 10 seconds.

10.4 If a power failure or similar event occurs before the jackpot system would have awarded a jackpot to a winning gaming machine, then the jackpot system must, if possible, award the jackpot to the same gaming machine immediately after coming back on-line or allow a hand-pay.

### 11 Protocol Requirements

11.1 There must be a reliable 2-way communications protocol between all components forming part of a jackpot system.

11.2 Communication of data and information (e.g. base jackpot increment rate, gaming machine contributions and win notification) between a linked gaming machine and the jackpot controller must be via a reliable 2-way communication protocol.

11.3 The protocols used must have some form of error detection and error recovery capability. The suggested minimum error detection algorithm quality is a 16 bit CRC.

11.4 Jackpot controller communication ports must be galvanically isolated from each other to prevent any interference that could arise due to connection of subsidiary equipment on another port.

11.5 Data transferred to the gaming machine must, in addition to that required for the operation of a linked jackpot system, include additional data required for game and player information displays on gaming machines (e.g. jackpot RTP).

11.6 To prevent the loss of contributions due to device failure or transmission errors, discrete contribution packets must not be transferred between subsystems at any stage within a jackpot system. All contributions must be continuous (i.e. via total/gross meters).[[1]](#footnote-1)

11.7 Contributions to the jackpot pool under expected system operating conditions must take no longer than 5 seconds to be incorporated into the jackpot pool amount.

11.8 The jackpot system must place unreasonable contribution limit tests on all contributions before any contribution is applied to the jackpot pool, and:

(a) the unreasonable contribution limit must detect contribution increment amounts that are within the limits of typical play and the maximum wager would be considered not likely (i.e. unreasonable);[[2]](#footnote-2)

(b) the unreasonable contribution limit must be as small as possible;

(c) the unreasonable contribution limit must be set proportional to the number of linked gaming machines and the time between successive contribution increments received;

(d) any linked gaming machine providing the unreasonable contribution must be removed from contributing to the jackpot and a message to that effect displayed for that gaming machine;

(e) any unreasonable contribution must not contribute to the jackpot current amount or create any chance of winning the jackpot.

11.9 Where adjustments to the unreasonable contribution limit are possible (i.e. the limit is not hard coded), the jackpot controller must:

(a) provide adequate protection to ensure the limits can only be changed by authorised personnel; and

(b) record the change, with full details, as an event.

11.10 Jackpot systems must provide a self-audit check. The following are recommended ‘self-audit check’ requirements for jackpot systems:

(a) the jackpot system must perform a self-audit check on each jackpot level whenever an event of significance occurs;

(b) “events of significance” include, but are not limited to, a jackpot reset, logic door close, memory reset, parameter change and gaming machine configuration change;

(c) self-audit checks must also be performed prior to the updating of critical memory and upon a jackpot hit; and

(d) as minimum, the self-audit check should reconcile jackpot meters using the following formula:

*Current Jackpot amount + Overflow = (Total turnover to jackpot \* Percentage Increment) + (Hits \* Reset Amount) + Initial Start-up – Total Jackpot Wins*.

11.11 Failure of the self-audit check, where provided, must cause the jackpot controller to enter an unrecoverable memory error.

11.12 For auditing purposes, any unreasonable contributions detected must result in an event with full details that contain, as a minimum, the following information:

(a) a date and time stamp;

(b) gaming machine serial number;

(c) amount of the invalid contribution; and

(d) new final total unreasonable contribution meter amount.

11.13 Meters must be auditable and conform to Australia New Zealand Gaming Machine National Standard meter requirements.

11.14 It may be possible to trigger more than one jackpot level simultaneously on a multi-level jackpot system on any given play to the same player. Each win on a level may be combined into one prize; however, all audit information must clearly show the win and contribution for each level.

11.15 The jackpot controller must, if not integrated with CEMS, conform to Australia New Zealand Gaming Machine National Standard requirements for cabinet and logic area security as applicable.

11.16 The jackpot controller must protect the parameter set configuration values and variables and recalculate the appropriate trigger variables (i.e. pick a new randomly selected mystery trigger value in the range of the current prize amount and the ceiling amount) if it detects any security breach. This must be done after every detected jackpot controller cabinet access.

11.17 All jackpot and win events must be date and time-stamped.

11.18 Real Time Clock use and setting must be in conformance with the requirements of the Australia New Zealand Gaming Machine National Standard.

11.19 Date and time information may be synchronised with one of the linked gaming machines.

### 12 Jackpot System Equipment – Hardware and software

12.1 Any jackpot system component(s) not contained within a linked gaming machine cabinet (excluding displays and cables) must be stored within a lockable, secure jackpot cabinet such that they are not accessible by unauthorised casino staff or players.

12.2 Jackpot cabinets may be stored within a cashbox cabinet area provided there is a separately keyed locked barrier between the cashbox and jackpot controller.

12.3 All jackpot controller cabinets must be sealed.

12.4 Jackpot cabinets must be accessible to allow the inspection of seals.

12.5 The power supply to the jackpot controller and connected displays must not be able to be accessed by players.

12.6 All exposed cables must be enclosed in plastic conduits to prevent tampering.

12.7 A jackpot system must have a unique name. This does not prevent the jackpot being marketed under other names.

12.8 The lockable secure cabinet and/or each separate component in the jackpot system must have a secure label affixed showing the following information:

(a) Link Jackpot System Name

(b) Manufacturer Manufacturer’s Name

(c) Unit Function Unit Function Name

(d) Approval Number #####

(e) Serial Number Unique serial number

12.9 Components such as generic displays and cabling need not be labelled.

12.10 Linked jackpot equipment must not be capable of affecting the outcome of a game on a gaming machine to which it is linked.

12.11 Jackpot systems must not have the capability to download software or parameter values remotely (off-venue).

12.12 All software including any approved jackpot parameter set must be securely stored in EPROM or other PSD.

12.13 The jackpot controller may provide a facility to authenticate the validity of the jackpot controller software including the configuration parameters. The following methods are recommended:

(a) comparison of installed software against the approved software such as an EPROM verification; and

(b) provision of a facility to perform a signature verification.

12.14 Signature algorithm and signature display requirements must comply with the Australia New Zealand Gaming Machine National Standard as applicable.

12.15 Prior to the first jackpot and upon a RAM clear, a jackpot system must allow configuration of the start-up and overflow pool values in accordance with the transfer of the current pool value from a decommissioned or faulty jackpot.

12.16 Jackpot system documentation must be provided as per applicable Australia New Zealand Gaming Machine National Standard requirements.

### 13 Jackpot Shutdown

13.1 It must not be possible for the jackpot to be won while in the shutdown state. A jackpot shutdown requires:

(a) all contributing gaming machines to have their jackpot feature disabled; and

(b) all displays of jackpot information to provide clear indication that the jackpot is not operating (e.g. by saying “Jackpot Closed” or “Jackpot Unavailable”).

13.2 Activation of the jackpot from the shutdown state must return the jackpot with identical parameters as that before the shutdown including the jackpot current pool values and trigger values for mystery jackpots.

13.3 Contributions not received in real-time (except unreasonable contributions) which directly impact on the jackpot trigger (e.g. mystery jackpots), such as those received during a shutdown period due to gaming machine disconnection, or missed packets, must not be added to the jackpot pool or pools. These contributions may be added to gaming machine non-contribution meter within the jackpot controller.

### 14 Jackpot Update and Display

14.1 A meter display, displaying jackpot details (e.g. current value and indication of a jackpot win), must be readily visible to all players playing an gaming machine connected to the jackpot equipment without the player having to move significantly from the normal position of playing a gaming machine (e.g. the player should not have to turn 180 degrees to their rear to view a display).

14.2 Use of an on-screen overlay display on a linked gaming machine is permitted providing any information that can appear on the normal screen display:

(a) is not obscured; and

(b) is not affected such that the display visibility becomes non-compliant with the standard under which it was approved.

14.3 The display of the current amount of the jackpot(s) must be updated accurately and as often as possible so as to reasonably reflect the current size of the prize pool. When a jackpot prize is won, the display must ‘catch up’ to the precise value of the jackpot won.

14.4 If a display detects loss of connection, then to avoid displaying aged or possibly incorrect current amounts, the display may timeout after 30 seconds.

14.5 If the jackpot controller detects loss of connection to the primary jackpot display or display controller, and all other methods of displaying the current jackpot amount to participants of the jackpot have stopped operating, the jackpot must be shutdown.

14.6 Artwork must conform to Australia New Zealand Gaming Machine National Standard requirements as applicable.

14.7 If gaming machines on a jackpot system remain in play during a jackpot win animation/jackpot notification, then the jackpot display system must be able to display two or more win animations/jackpot notifications in close succession without causing confusion.

14.8 On power-up, a jackpot display system must not display current amounts until the current amounts have been updated by the jackpot controller.

14.9 The current amounts of the jackpot prize pool must be displayed to all players of the jackpot system during jackpot play except:

(a) during idle animations which can be displayed for no more than 45 seconds in every 5 minute period;

(b) during win animations which can be displayed for no more than 30 seconds per win;[[3]](#footnote-3) and

(c) after a win animation, when it is acceptable to cycle short win messages with current amounts, until the win is paid.

### 15 Jackpot Win Notification and Reset

15.1 It must be clear to a player upon winning a jackpot that they have won and what prize they are eligible for. As a minimum the following indications must be present when a jackpot prize is won:

(a) An audible alarm when a significant or hand-pay jackpot win occurs. The alarm must have a volume control easily identifiable and able to be adjusted separately from other sounds;

(b) A visual indication of being eligible for the win on the winning gaming machine; and

(c) A visual indication of the winning prize and winning gaming machine ID on the main jackpot display, unless the prize information on the display is available on all the participating gaming machines.

15.2 Any win message downloaded to the gaming machine must in turn be verified with the controlling device as having been received and that the amount received is correct.

15.3 As a minimum it is recommended that where possible every stage through which the win notification is transferred should be protected using error detection, error recovery and state recovery.

15.4 The time taken for a jackpot to reset after a jackpot win event must, as a minimum, not be less than the longest time taken to:

(a) display the win on the display;

(b) allow all players to be advised of the win; and

(c) notify the wining gaming machine and verify, if verification functionality is provided, the amount received.

15.5 Play may be disabled or interrupted on the winning linked gaming machine to sound a win fanfare and display a win message on that gaming machine.

### 16 Master and Slave Jackpot Controllers

16.1 Communication between Masters and Slaves must meet all of the communication requirements for linked gaming machines and other components of a jackpot system.

16.2 All Slave Controller date/times must be synchronised with the designated Master Controller.

16.3 If supporting a Mystery Jackpot, the priority of receipt of contributions from all gaming machines, whether from Master or Slave controllers, should be virtually identical.

### 17 Jackpot Parameters

17.1 A manually settable flag may be provided such that if the flag is set to “on” when a jackpot or level is to be modified or closed, the jackpot or level is shut down after the current jackpot is triggered.

17.2 A set of jackpot parameters must include, as a minimum, the following detail for each jackpot level:

(a) Jackpot Minimum(s) - the Base or Reset amount(s) and how it is funded when a non-zero start-up value is specified;

(b) Jackpot Maximum(s) and what happens to any excess contributions;

(c) Jackpot Contribution Rate(s) as a percentage of the amount bet; and

(d) how the jackpot is reconciled against linked gaming machine turnover contributions.

17.3 Changes to a parameter set comprising start-up value, maximum win value, and increment rate for a jackpot or level, is only permitted following a full RAM clear of the jackpot controller.

17.4 Any changes to jackpot parameters must be via secure access using a secure methodology.

17.5 To ensure the correct gaming machines are enrolled on the jackpot system (thereby preventing a jackpot going to the wrong gaming machine or jackpot display system), the jackpot system may have a set-up mode available at any time which allows each linked gaming machine or jackpot display system’s serial/identification (ID) number to be displayed or printed and cross checked with its corresponding gaming machine ID and jackpot ID.

17.6 Jackpot amounts are to be stored in absolute values rather than in terms of the number of plays of the jackpot.

### 18 Simultaneous Jackpot Winners

18.1 The jackpot design must be such that the occurrence of two or more players winning the same jackpot pool prize simultaneously is not possible or statistically of a very low occurrence. A simultaneous win is a win triggered by more than one gaming machine during the period before the jackpot display has indicated a win to the first gaming machine and/or reset jackpot level amounts to the new pool values.

18.2 The jackpot controller must correctly allocate the win to one gaming machine only. It is sufficient that the winning gaming machine is identified as the first gaming machine processed by the jackpot controller. The second and other machines are to be awarded the jackpot reset value.[[4]](#footnote-4)

18.3 An “event” should be generated for a simultaneous win where a win is registered by another gaming machine before the jackpot system has reset the jackpot level amounts to the new jackpot pool value.

### 19 Jackpot Audit and Event Data

19.1 For the last 100 jackpots won, the jackpot controller must store and maintain, with a date and time stamp, the following software meters for each jackpot level:

(a) History of individual jackpots won including the unique identification number of the winning linked gaming machines i.e. jackpot identification number (“JIN”);

(b) Total amount played for jackpots;

(c) Total amount of jackpots won;

(d) Total jackpot contributions;

(e) Current amount of jackpot;

(f) Actual start-up jackpot value if different to parameter set start-up value;

(g) Number of times the logic area(s) have been accessed;

(h) Current value of jackpot contributions diverted; and

(i) The history of each consequential Supplementary Monetary Prize as allowed pursuant to standard 21.

19.2 All parameters, audit trails, variables, and events relating to at least the last 100 jackpots won must be stored in the jackpot controller.

19.3 All jackpot systems must be fully auditable. The jackpot system must maintain complete audit trails, event logs and accounting meters.

19.4 “Events” also include any other normal or abnormal change in activity or status of the jackpot system in addition to those already defined in this document. For example, if a jackpot controller was to power down for any reason this would be an event to be recorded.

19.5 All jackpot system current amounts must be fully reconcilable from meters (e.g. contributions, hits and wins per linked gaming machines etc) and stored in the jackpot system.

19.6 For auditing and monitoring purposes, an external jackpot controller must provide an isolated serial communication port interface for connection to a PC. Jackpot interfacing software which is able to be utilised on a PC to interface and access controller audit data must be made available.

19.7 The protocol design specification used to request and retrieve audit data must be readily available upon request.

19.8 In audit mode or when audit information is downloaded, it must not be possible to alter any meters or status conditions (other than audit status) or other sensitive parameters.

19.9 It must be possible to reconcile contributions from each linked gaming machine with total contributions received by the jackpot controller via the audit interfaces.

19.10 If the jackpot controller and jackpot trigger device are not the same component, then it must be possible to reconcile total contributions received between the two components via an audit interface on each of the devices.

19.11 It is recommended that as a minimum, the following information is to be retrievable from the jackpot system audit interfaces upon request:

(a) The current date and time;

(b) The meter value of all individual linked gaming machine contributions received;

(c) The meter value of all individual linked gaming machine contributions not added to the jackpot pool;

(d) Current display meter value per jackpot level;

(e) Pool overflow meter value per jackpot level;

(f) All jackpot parameters such as:

(i) Start-up (in $);

(ii) Ceiling (in $);

(iii) Percentage Increment (%);

(g) Date and time of the last parameter change including details of the change made;

(h) Total value of unreasonable meter pools; and

(i) Any available optional event data for jackpot and linked gaming machine status.

### 20 Critical Memory Error Detection

20.1 All jackpot system contributions received, all variables pertaining to the current jackpot pool or pools, hidden values, jackpot trigger, paid wins, and all jackpot parameter changes must be regarded as critical data and must conform to the critical memory requirements of the Australia New Zealand Gaming Machine National Standard as applicable.

20.2 It is recommended that the jackpot trigger program be validated against possible corruption upon every power-up, logic door closures, parameter changes and periodically (at a minimum once a day) by comparing it with the previously saved or hard-coded program digital signature.

### 21 Jackpot Supplementary Monetary Prize

21.1 It is permitted for a linked progressive jackpot system to additionally award Supplementary Monetary Prizes (SMPs) in conjunction with the awarding of a standard jackpot prize upon the occurrence of a jackpot prize pool trigger event, providing:

(a) all preceding requirements apply to the award of a SMP as for a main jackpot prize, unless modified or excluded by the requirements of this section;

(b) SMPs may only be awarded to contributing gaming machines that are part of the linked jackpot arrangement;

(c) only one SMP can be awarded to a gaming machine for any one jackpot prize pool trigger event;

(d) the percentage of gaming machines that can be awarded a SMP out of the total number of gaming machine connected to the jackpot must be configurable by the casino operator;

(e) the size of the SMP prize pool in relation to the major jackpot prize pool must be configurable by the casino operator; and

(f) the maximum value of a SMP must be configurable by the casino operator.

21.2 A jackpot level must include in any maximum win values or other calculations, as appropriate, the value of preset maximum SMPs such that:

(a) the effective increment rate of a jackpot prize pool includes any contributing percentage required to fund the maximum SMP including any start-up value; and

(b) the self-audit check includes SMP data as necessary for reconciliation.

21.3 A gaming machine eligible to be awarded a SMP must:

(a) not be the gaming machine that triggered the jackpot prize pool;

(b) be in game play at the time the jackpot prize pool is triggered; or

(c) if not in game play, have contributed to the jackpot pool no later than 30 seconds preceding the jackpot trigger event; and

(d) be selected randomly from those gaming machines eligible to be awarded a SMP.

21.4 If a jackpot system awards SMPs, the minimum advice which must be displayed includes:

(a) how many SMPs are able to be awarded;

(b) the individual maximum value of any SMP;

(c) the start-up value of the SMP (if a progressive amount);

(d) the basis of gaming machine selection; and

(e) a statement that a gaming machine not played up to 30 seconds prior to a jackpot being triggered may be awarded a SMP.

21.5 If a jackpot system awards SMPs, it is optional to display:

(a) the current value of any or all SMPs; or

(b) SMP wins on the main jackpot display or any participating gaming machine.

21.6 For the purposes of accounting reconciliation, the total value of any SMP awarded may be included in the actual total jackpot prize paid for any level providing any event or other data clearly identifies each SMP awarded.

1. For example, a gaming machine on a jackpot with a total turnover of $1234 which plays 5 games at $1 each, discrete contributions would be of the form of up to five messages containing amounts of; 1, 1, 1, 1, 1 whereas continuous contributions would be of the form of up to five messages containing amounts of 1234, 1235, 1236, 1237, 1238. [↑](#footnote-ref-1)
2. Note: it is not intended that the unreasonable contribution limit be gaming machine specific but would likely be a global value representative of all gaming machines and games played. The intent is to ensure jackpots do not increment excessively such as, but not limited to, due to corrupted contribution amounts received which are caused by meter runaways or a roll over not correctly handled. [↑](#footnote-ref-2)
3. This is to avoid the situation where there is a backlog of win animations [↑](#footnote-ref-3)
4. Where a gaming machine is awarded the jackpot reset value under a simultaneous win event condition, the value awarded is to be regarded for audit and reconciliation purposes as a jackpot win. [↑](#footnote-ref-4)