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| **File Number:** |  |
| **Item(s) Tested (ID & Version #’s):** |  |
|  | |
| **Completed By (Test Engineer):** |  |
| **Reviewed By (Senior Engineer):** |  |

**PLEASE NOTE: This checkoff contains the Australia/New Zealand Gaming Machine National Standards v10.0-v10.3.**

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| **The format of this Conformance Criteria is as follows:** | |
| **In the Determination column indicate one of the following:** | |
| Pass | The element tested conforms to the requirements of the section; |
| Fail | The element tested does not conform to the requirements of the section; |
| N/A | This section is not applicable to the element being tested |
| **In the Internal Notes column indicate the following:** | |
| Any condition or comment that may need to be included in the final report. | |
| If N/A is listed in the Determination column, an explanation of why it is not applicable must be provided in accordance with PC-TC-001 Policy for Checkoffs and Forms. | |

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| **Tested against Requirements** | Australia/New Zealand Gaming Machine National Standards v10.0 | <[link](http://njintranet5/sites/qms/GLI%20Document%20Library/Compliance/Jurisdictional%20Checkoffs/Australian%20Standards/INACTIVE%20-%20National%20Standard%20Rev%2010.pdf)> |
| Australia/New Zealand Gaming Machine National Standards v10.1 | <[link](http://njintranet5/sites/qms/GLI%20Document%20Library/Compliance/Jurisdictional%20Checkoffs/Australian%20Standards/National%20Standard%20Rev%2010.1%20(SA).pdf)> |
| Australia/New Zealand Gaming Machine National Standards v10.2 | <[link](http://njintranet5/sites/qms/GLI%20Document%20Library/Compliance/Jurisdictional%20Checkoffs/Australian%20Standards/National%20Standard%20Rev%2010.2%20(SA).pdf)> |
| Australia/New Zealand Gaming Machine National Standards v10.3 | <[link](http://njintranet5/sites/qms/GLI%20Document%20Library/Compliance/Jurisdictional%20Checkoffs/Australian%20Standards/National%20Standard%20Rev%2010.3%20(SA).pdf)> |

**PLEASE COMPLETE THE ANZ NATIONAL STANDARDS 10.X SUBMISSION APPROVAL CHECKLIST (FM-EN-478-AU) ALONG WITH THIS CHECKOFF.**

**Limits and Parameters**

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| **Australia/New Zealand Gaming Machine National Standards** | |
| The following are definitions of the parameters/limits that will be established for gaming machines. These parameters may be set by the Jurisdiction, Operator or Manufacturer. Some parameters may vary depending upon the gaming machine itself (e.g. there may be a different Hopper Refill amount depending upon relative sizes of hoppers):  **NOTE to Engineer: Refer to the applicable Australian Market’s** **Checkoff for the values to these parameters.** | |
| **Parameter** | **Definition** |
| **[BKNTLIM]** | The maximum credit balance which may exist on a gaming machine or account beyond which a note acceptor must be disabled due to a High Credit Balance condition. |
| **[CRECANLIM]** | Maximum number of credits payable from the hopper for non-tokenised gaming machines before a cancel credit or ticket pay must be used. |
| **[GAMBWIN]** | The maximum win that can be obtained from each single gamble attempt. |
| **[LARGEWIN]** | Substantial Win amount - wins greater than or equal to this value must generate a gaming machine Event. |
| **[MAXHOPPER]** | Maximum amount of money payable from the hopper for tokenised gaming machines before a cancel credit or ticket pay must be used. |
| **[MAXNPWIN]** | Maximum non-progressive win permitted in any game element (any individual primary or feature or gamble or bonus element). |
| **[MAXPWIN]** | Maximum progressive win permitted in a gaming machine game. |
| **[MAXRTP]** | Maximum theoretical acceptable return to player. |
| **[MAXWAGER]** | Maximum wager permitted in a gaming machine game. |
| **[MINRTP]** | Minimum acceptable return to player. |
| **[PSAVACT]** | The period of time a gaming machine must be in “Idle Mode” before activating power save. |
| **[TIMEDISP]** | Time must be displayed on the game screen. |

**NOTE to Engineer: The only differences between NS10.0 and NS10.1+ outside of the Jurisdictional Limits and Parameters are the following sections:**

* **NS3.2.14 Program Execution from Secondary Storage Media (v10.0)**
* **NS3.2.14 Program Execution from non-Primary Storage (v10.1+)**
* **NS3.17.11 - NS3.17.13 Closed-source Software (v10.1+)**

**NOTE to Engineer: The only differences between NS10.1 and NS10.2+ outside of the Jurisdictional Limits and Parameters are the following sections:**

* **NS4.3.18 Substitutes and Extra Pays (v10.0, 10.1)**
* **NS4.3.18 Substitutes and Extra Pays (v10.2+)**

**Jurisdictional Requirements**

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| **Australia/New Zealand Gaming Machine National Standards** | | | |
| **Cabinet** | | |  |
| **Cabinet Environment** | | **Determination** | **Internal Notes** |
| **NS2.3.22** | Gaming machines in Australia and New Zealand can be expected to operate in a variety of extreme environments. In the event that the designed operational parameters of a gaming machine are exceeded the machine if incapable of continued proper operation must perform an orderly shutdown without loss of game status, accounting and security event data. Typical operating environments may have: | | |
| a) a temperature variation from 10 degrees to 40 degrees Celsius;  b) a humidity variation of 15% to 85%;  c) dust and smoke particles. | Choose an item. |  |
| Note: In some remote locations, gaming equipment operates in an environment of 50 degrees Celsius and 99% humidity, and thus adequate ventilation must be provided for components within the gaming machine. | | |

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| **Memory** | | |  |
| **Program Execution from Secondary Storage Media (Version 10.0)** | | **Determination** | **Internal Notes** |
| **NS3.2.14**  **10.0 Only** | Program execution from the approved primary PSDs is preferred. However, if program execution occurs from secondary storage media (e.g. RAM), then the following conditions will apply: | | |
| a) When the program is loaded from the primary media to the secondary media, verification must take place at the end of loading. If the secondary media image is invalid, then an appropriate error message must be displayed and the image either re-created, or execution halted; | Choose an item. |  |
| b) Once loaded, the secondary media image must be continuously verified against the contents of the primary storage media. Each verification must commence within 2 minutes of the completion of the previous verification and a verification must be completed at least once in every hour; | Choose an item. |  |
| c) The verification procedure must use secure techniques such as CRC's or similar; | Choose an item. |  |
| d) If the verification procedure detects an error, the EGM will enter an unrecoverable RAM error requiring a full RAM clear; | Choose an item. |  |
|  | e) On each processor restart, the program contents of the secondary storage media must either be re-created or re-verified. | Choose an item. |  |
| Note : These requirements should not be seen as an impediment to the use of future technologies or alternative use of existing technologies which feature designs based on adequate software verification and security measures. | | |

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| **Metering** | | |  |
| **Master Meters** | | **Determination** | **Internal Notes** |
| **NS3.3.16**  **Table 3-1** | The following master meters must be displayed within a single, separately identifiable section of Audit Mode. Wherever displayed, master meters must be labelled with the name, in the order and using the units specified in the table below. Where a master meter is not supported by a corresponding machine or game function (e.g. BANKNOTES IN for a gaming machine which will not be fitted with a banknote acceptor) that master meter must display as its value ‘N/A’ or null: | Choose an item. |  |
| • GAMES PLAYED: total number of games played [plays] | Choose an item. |  |
| • TURNOVER: total value in dollars of bets made from the player’s credit meter (note gamble bets such as double up are not bet from the player’s credit meter) [$,] | Choose an item. |  |
| • TOTAL WINS: total value in dollars of all prizes awarded to the player’s credit meter (incl. Residual Credit Gamble prizes) [$,] | Choose an item. |  |
| • CANCELLED CREDITS: total of all credits cancelled from the Credit meter by attendant and all credits paid from the Credit meter by ticket [$,] | Choose an item. |  |
| • CASH BOX: total of all coins deposited to the cash (drop) box [$,] | Choose an item. |  |
| • COINS IN: total of all coins in but not hopper refills [$,] | Choose an item. |  |
| • COINS OUT: total of all coins out from hopper, but not extra coins out or short pays [$,] | Choose an item. |  |
| • EXTRA COIN OUT: total of all coins detected as dispensed in error from hopper (excluded from “coins out”) [count] | Choose an item. |  |
| • BANKNOTES IN: total of all banknotes accepted, if applicable. [$.] | Choose an item. |  |
| • CASHLESS IN: total of all credits electronically transferred to the gaming machine (if applicable), or paid to credit meter and not added to Total Wins [$.] | Choose an item. |  |
| • CASHLESS OUT: total of all credits electronically transferred from the gaming machine, if applicable [$.] | Choose an item. |  |
| • MONEY IN: total value in dollars of coins and or banknotes inserted to register credits on the player’s credit meter together with transfers to the machine to register credits on the player’s credit meter [$.] | Choose an item. |  |
| • MONEY OUT: total value in dollars of credits redeemed from the player’s credit meter by hopper pay, ticket print, cancelled credit or account transfer, but not extra coin out errors or short pays [$.] | Choose an item. |  |
| **Self Audit Check Formula** | | **Determination** | **Internal Notes** |
| **NS3.3.17** | A gaming machine shall perform a “self audit” of the appropriate master accounting data meters as described in the following formula:  **Credit Balance** = [(Coins IN + Banknotes IN + Cashless IN + Total WINS)(Coins OUT + Cancel Credits + Cashless OUT + Turnover)]%2^32.  Where: % is the modulus operator (to handle meter roll over). | Choose an item. |  |
| Note: The cases of a ‘meter roll-over’ should be taken into account when performing a “Self Audit” check. In the case of decimal meters, the modulus is 10^10. | | |
| **Progressive Meters** | | **Determination** | **Internal Notes** |
| **NS3.3.20**  **Table 3-2** | Stand alone progressive gaming machines must display upon request the following additional meters (in order) for each progressive prize offered: | | |
| • CURRENT VALUE: current prize amount [$,] | Choose an item. |  |
| • OVERFLOW: amount exceeding ceiling [$,] | Choose an item. |  |
| • HITS: number of hits for this progressive [count] | Choose an item. |  |
| • WINS: total value of wins for this progressive [$,] | Choose an item. |  |
| • STARTUP: startup value [$,] | Choose an item. |  |
| • CEILING: ceiling value [$,] | Choose an item. |  |
| • INCREMENT: percentage increment rate [%] | Choose an item. |  |
| • HIDDEN INCREMENT: percentage increment rate for the reserve pool [%] | Choose an item. |  |
| • INITIAL VALUE: initially entered after last RAM clear. (Used for creating a ‘lost’ jackpot.) [$,] | Choose an item. |  |

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| **Credit Redemption** | | |  |
| **Credit Redemption Conditions** | | **Determination** | **Internal Notes** |
| **NS3.7.1** | Available credits may be collected from the gaming machine by the patron pressing the “COLLECT” button at any time except : | | |
| a) during a play; | Choose an item. |  |
| b) while in Audit mode; | Choose an item. |  |
| c) while any door open condition exists; | Choose an item. |  |
| d) while in Test mode; | Choose an item. |  |
| e) while the player’s Credit Meter or Total Wins Meter is incrementing; | Choose an item. |  |
| f) while disabled by CMCS (see Chapter 8 Section 8.2.1 Credit Collect); | Choose an item. |  |
| **NOTE to Engineer: Refer to the applicable Australian Market’s Checkoff for their version of 8.2.1.** | | |
| g) while any fault condition exists (at the manufacturer’s discretion, credits may be collected from the gaming machine if the only existing fault condition(s) is(are) :-  i) ticket printer failure/paper error,  ii) progressive controller error or  iii) banknote acceptor full.) | Choose an item. |  |
| **Cancel Credit** | | **Determination** | **Internal Notes** |
| **NS3.7.2** | If the “COLLECT” button has been pressed where greater than the Maximum Hopper Payout, then the software shall automatically lock-up and go into a cancel credits condition. The software shall remain in this state until the credits have been cancelled by external intervention or the player selects an option to exit from the Cancel Credit state. | Choose an item. |  |
| **NOTE to Engineer: Refer to the applicable Australian Market’s** **Checkoff for the configuration methods for [CRECANLIM] and [MAXHOPPER]** | | |
| **Hopper Pay Conditions for Tokenised Games** | | **Determination** | **Internal Notes** |
| **NS3.7.4** | If less than or equal to the Maximum Hopper Payout amount exist on the credit meter and the COLLECT button is pressed, then these credits must be converted to the appropriate number of coins and dispensed from the hopper. For the requirements covering the removal of residual credits, see Section 3.9.40 Residual Credit Removal. | Choose an item. |  |
| **NOTE to Engineer: Refer to the applicable Australian Market’s** **Checkoff for the configuration methods for [MAXHOPPER]** | | |

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| **Game Play** |  |

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| **Game Minimum RTP** | | **Determination** | **Internal Notes** |
| **NS3.9.15** | A game must have a theoretical/estimated statistical expectation that the minimum player return (RTP) of the game will be greater than or equal to [MINRTP] | Choose an item. |  |
| **NOTE to Engineer: Refer to the applicable Australian Market’s** **Checkoff for the values for [MINRTP].** | | |

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| **Reels, Wheels, Dice, Coins or other real world object** | | **Determination** | **Internal Notes** |
| **NS3.9.62** | For games that simulate or involve spinning reels, spinning wheels (such as roulette), rolling of dice, tossing of coins, or other similar activities the following will apply: | | |
| a) for each spinning reel, the probability of any one position appearing must be as for the actual physical device (e.g. 1/20 for a 20 position reel), unless the game rules clearly indicate otherwise (refer Artwork requirements), | Choose an item. |  |
| b) for each spinning wheel, die, or coin etc., the probability of any one face appearing must be as for the actual physical device (e.g. 1/10 for a 10 segment wheel; 1/6 for a 6 faced die; ½ for a coin),  **NOTE TO ENGINEER:** This requirement applies to all types of wheel, die, coin or real world objects presented to the player. The probability and visual representation of each face/segment that is displayed must be equivalent to that of the real world object (eg. All positions of a 10 segment wheel occur 1/10 where each segment is visually of equal size, where the segments are of unequal size the probability of each segment must equate to the segments relative portion of the whole wheel, all sides of a die occur 1/6 for a 6 faced die). **It is not acceptable to circumvent this requirement via artwork rules.** | Choose an item. | **Note to Engineer:**  The probability and visual display of each segment must be verified against the probabilities documented in the math results |
| c) the behaviour of each reel, wheel, die, or coin etc. must be independent of all others, and | Choose an item. |  |
| d) the behaviour of each reel, wheel, die, or coin etc. must be independent of its previous behaviour. | Choose an item. |  |

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| **Gaming Machine Events** | | |  |
| **Gaming Machine Door Open/Close Event Definitions** | | **Determination** | **Internal Notes** |
| **NS3.16.6**  **Table 3-7** | The following table defines Door Open/Close events: | | |
| • Gaming Machine Door Open - The main cabinet door has opened | Choose an item. |  |
| • Cash box Door Open - The cash box door has opened | Choose an item. |  |
| • Logic Area Door Open - The main CPU door has opened. This event is to cause the gaming machine to lock up until the door is closed and the event cleared by an approved method, e.g. command from a host computer system (see Chapter 8 Section 8.2.4 Logic Area Access) | Choose an item. |  |
| **NOTE to Engineer: Refer to the applicable Australian Market’s Checkoff for their requirements for the enabling of a gaming machine after the logic door has been closed (8.2.4).** | | |
| • Other Secure Area Accessed - Any other secure area has been accessed (e.g. banknote acceptor door) | Choose an item. |  |
| • Gaming Machine Door Closed - The main cabinet door has closed | Choose an item. |  |
| • Cash box Door Closed - The cash box door has closed | Choose an item. |  |
| • Logic area Door Closed - The main CPU door has closed. | Choose an item. |  |
| • Other Secure Area Secured - Previously accessed secure area has been secured | Choose an item. |  |
| Note: All of the door open events must be indicated to the user upon their occurrence, with the procedures defined in Section 3.5.3 Door Open Procedures to be performed. All of the following events are door closed events and must be indicated upon their occurrence to the user. Only when all doors are closed should the gaming machine perform the procedures defined in the Section 3.5.4 Door Close Procedures. | | |
| **Artwork** | | |  |
| **Introduction** | | **Determination** | **Internal Notes** |
| **NS4.1.4a** | Two or more statements of the wording in bold font may be presented in combination by the use of “**,**” and/or “**and**” provided that the meaning of the resulting statement remains clear. | | |
| **NS4.1.5** | If the term "**[X]**" is used in this chapter, then either a depiction of the symbol, or a phrase or word that represents the symbol may be used. The term "**[X] [Y] and [Z]**" refers to more than one symbol in the same way. | | |
| **Spinning Reel Games** | | |  |
| **Substitute Symbols** | | **Determination** | **Internal Notes** |
| **NS4.3.15** | The artwork must state which symbols are substitute symbols. If a symbol is a substitute symbol, the artwork must state for which winning patterns and for which symbols the symbol substitutes, and any conditions that may apply. This must be done in the following manner: | | |
| a) If the substitute symbol substitutes for all symbols, the statement "**[X] substitutes for all symbols**" must be used. | Choose an item. |  |
| b) If there is more than one substitute symbol, and each substitutes for all symbols, then the statement "**[X] [Y] and [Z] substitute for all symbols**" must be used. | Choose an item. |  |
| c) If the substitute symbol does not substitute for all symbols then either the statement "**[X] substitutes for all symbols except [A], [B] and [C]**" where [A], [B] and [C] are the exceptions, or the statement "**[X] substitutes for [A], [B] and [C]**" must be used. | Choose an item. |  |
| d) If there is more than one substitute symbol, where each substitute symbol has the same exceptions, the statement "**[X] [Y] and [Z] substitute for all symbols except [A], [B] and [C]**" must be used, where [A], [B] and [C] are the exceptions. | Choose an item. |  |
| e) If the substitute symbol substitutes for line wins and for only the highest paying scattered symbol appearing, the statement "**[X] substitutes for the highest scatter win only and for all other symbols**" is required. | Choose an item. |  |
| f) If the substitute symbol(s) does(do) not behave according to a) through e), then statements that completely identify which symbols are substituted for and which symbols are not substituted for, are required. | Choose an item. |  |

# **Version History**

**All version history, to date, is in hidden text. To view the version history in its entirety, please select Ctrl + Shift + \*.**

**REVISION HISTORY – This will NOT print!!!**

**(09/15/2015) (L.Anand/M.Robbins)-** New Form.

**(03/04/2016) (AC)** Updated pg. 1 to reflect those jurisdictions who still observe NS10.X

(MR) Verified updates made by AC on 09-Mar-2016.

**(07/22/2016) (LA)** Removed both NSW and WA as an applicable jurisdiction for this checkoff as they now adhere to NS2015.Changes verified by A. Campbell.

**(02/28/2017) (AC) -** Added NZ adoption date information to NS2016 on pg.1 **(LA)** Verified changes made by AC.(rs)

**(04/05/2017)** (AC) Added VIC adoption date information to NS2016 on pg. 1 (**LA**) Verified changes made by AC(rs)

**(04/10/2017)** (**L.Anand**) - Added “any subsequent NS versions” to SA market adoption on pg 1. Renamed FM-TC-1199-AU on pg 1 to AUS/NZ NS 2015-16 EGM checkoff to reflect the current checkoff name and added this checkoff as a reference for not just “other” jurisdictions but for all jurisdictions that have adopted NS2015-16. (**A.Campbell**) Verified changes made(rs)

**(06/16/2017)** (**C.Luzuk**) –Removed NZ as it no longer adopts NS10.0. NS2016 is mandatory for NZ from 5 June 2017. Verified changes made **L.Anand(rs)**

**(10/27/2017) (C.Luzuk)** Removed NS10.0 from VIC on pg1 as this is now superceeded. **(L.Anand)** Verifed all changes made.(rs)

**(05/9/2018) (A.Lee)** Updated all SharePoint links on the first page to the new SharePoint site. **(L.Anand)** Verified all changes made.(ls)

**(04/06/2020) (A.Lee) -** Updated NS3.9.57 to clarify that Double Tap functioanality is regarded by AUS/NZ Regulators as illusory**.**Updated NS3.9.62 (b) to clearly require.this test to be conducted for all types of wheel, die, coin or real world objects presented to the player.**(L.Anand)** Verified all changes made.(rs)

**(04/14/2020) (L.Anand) -** Removed NS3.9.57 clarification for Double Tap functioanality based on further discussions with Peter Wolff and Mike Robbins. This should only apply to NSW and QLD jurisdictions and is covered in their respective checkoffs(rs)

**(06/21/2021) (N.Gee) –** Performed 5 year review and verified document is up to date. Updated last date verified, no other changes required.(rs)

**(08/24/2021) (L.Anand) -** Removed reference to SA on page 1 as SA observes GMNS 2016 or higher. **(N.Gee)** Verified all changes made.(rs)