Manufacturing Standards for Electronic Pull-Tabs

Manufacturing standards for the design and manufacture of:

- Electronic pull-tab games
- Electronic pull-tab devices
- Electronic pull-tab game systems
Certified independent lab testing is required in Minnesota for certain electronic gambling equipment.

Independent testing requirements for electronic gambling equipment* shall include a certification from a Minnesota Gambling Control Board-approved testing laboratory that the electronic gambling equipment tested meets the manufacturing standards and requirements as established in Minnesota Statutes and Minnesota Rules and in conformance with game procedures as provided by the manufacturer.

The certification must include:
1. A detailed description of the equipment and related software applications that were tested, including applicable model numbers of specific equipment and the software version of the application used for testing and the extent to which actual games were tested, including any actual game simulation or load testing parameters, to confirm all game elements and to assure proper prize payouts and any bonus play.

2. The specific reference to the standard being tested and a statement that the equipment meets the standard.

3. Any additional findings or issues of concern that might affect the performance or play of the equipment.

*(See Minn. Rules 7864.0235, s. 38, Item K)*

* Electronic gambling equipment includes:
  - Electronic pull-tab systems.
  - Electronic pull-tab devices.
  - Programmable electronic devices.
  - Upgrades or changes to previously approved and tested equipment.
  - Other technical hardware devices used in conjunction with lawful gambling equipment.
  - Software applications and version upgrades used in conjunction with lawful gambling equipment.
  - User-acceptance testing, which ensures the different functionalities of the system and software work as they would in real-life scenarios. User-acceptance testing includes:
    - Accurate game simulation.
    - Verification of each ticket to ensure consistency in ticket display and ticket play.
    - Game and ticket displays match the flare as approved by the Minnesota Gambling Control Board.
    - Tickets and prize distribution within each deal are random.
    - Quality assurance, including that:
      > Game payout indicators and payouts displayed on flares match.
      > Ticket symbols are accurate and match the flare.
      > Games play as stated on the flare.
      > The proposed game version and the version provided by the manufacturer to the board for testing for consideration of approval are identical.

*(See Minn. Rules 7864.0235, s. 38, Item L)*
### ELECTRONIC PULL-TAB DEVICE REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Must be handheld, portable, and powered by an integrated battery source</td>
<td>349.12, s. 12b; 7861.0210, s. 26a; 7864.0235, s. 5b; 7a</td>
</tr>
<tr>
<td>2. Must be able to play one or more electronic pull-tab games.</td>
<td></td>
</tr>
<tr>
<td>3. Must not allow for the purchase of an electronic linked bingo game from</td>
<td></td>
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<tr>
<td>any screen of an electronic pull-tab game.</td>
<td></td>
</tr>
<tr>
<td>4. Requires coded entry to activate play but does not allow the use of</td>
<td></td>
</tr>
<tr>
<td>coin, currency, or tokens to be inserted to activate play. Coded entry</td>
<td></td>
</tr>
<tr>
<td>may include manual entry by a player, use of a magnetic strip card or bar-</td>
<td></td>
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<tr>
<td>coded receipt provided at point of sale.</td>
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</tr>
<tr>
<td>5. Requires a player to activate or open each electronic pull-tab ticket</td>
<td></td>
</tr>
<tr>
<td>and each individual line, row, or column of each electronic pull-tab</td>
<td></td>
</tr>
<tr>
<td>ticket.</td>
<td></td>
</tr>
<tr>
<td>6. Must maintain information pertaining to accumulated win credits that</td>
<td></td>
</tr>
<tr>
<td>may be applied to games in play or redeemed upon termination of play.</td>
<td></td>
</tr>
<tr>
<td>7. Must have no spinning reels or other representations that mimic a video</td>
<td></td>
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<tr>
<td>slot machine.</td>
<td></td>
</tr>
<tr>
<td>8. Must have no additional function as a gambling device other than as an</td>
<td></td>
</tr>
<tr>
<td>electronic linked bingo device.</td>
<td></td>
</tr>
<tr>
<td>9. May incorporate an amusement game feature as part of the pull-tab game</td>
<td></td>
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<tr>
<td>but may not require additional consideration for that feature or award</td>
<td></td>
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<tr>
<td>any prize, other than what was originally predetermined, or other benefit</td>
<td></td>
</tr>
<tr>
<td>for that feature.</td>
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</tr>
<tr>
<td>10. May have auditory or visual enhancements to promote or provide</td>
<td></td>
</tr>
<tr>
<td>information about the game being played, provided the component does not</td>
<td></td>
</tr>
<tr>
<td>affect the outcome of a game or display the results or status of a game.</td>
<td></td>
</tr>
<tr>
<td>This provision includes message and error alerts to the player.</td>
<td></td>
</tr>
<tr>
<td>11. Must maintain, on non-resettable meters, a printable, permanent</td>
<td></td>
</tr>
<tr>
<td>record of all transactions involving each device and electronic pull-tab</td>
<td></td>
</tr>
<tr>
<td>games played on the device.</td>
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</tr>
<tr>
<td>12. Must have the capability to allow use by a player who is visually</td>
<td></td>
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<tr>
<td>impaired.</td>
<td></td>
</tr>
<tr>
<td>13. Electronic pull-tab devices must operate on the same version of all</td>
<td></td>
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<tr>
<td>installed software.</td>
<td></td>
</tr>
</tbody>
</table>

### ELECTRONIC PULL-TAB GAME REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Must display facsimiles of pull-tab tickets.</td>
<td>349.211, s. 2a; 349.2113; 349.12, s. 12c; 7864.0235, s. 5a</td>
</tr>
<tr>
<td>2. Must have a predetermined, finite number of winning and losing tickets,</td>
<td></td>
</tr>
<tr>
<td>not to exceed 7,500 tickets.</td>
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</tr>
<tr>
<td>3. Each ticket in the game must play for the same price.</td>
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</tr>
<tr>
<td>4. The price paid by the player must not be less than 25 cents per ticket</td>
<td></td>
</tr>
<tr>
<td>and more than $5 per ticket.</td>
<td></td>
</tr>
<tr>
<td>5. Facsimiles of pull-tab tickets must be in conformance with applicable</td>
<td></td>
</tr>
<tr>
<td>Board rules for pull-tabs.</td>
<td></td>
</tr>
<tr>
<td>6. Winning tickets must comply with prize limits under Minn. Stat. § 349.211</td>
<td></td>
</tr>
<tr>
<td>7. Must have a unique serial number that may not be regenerated (unique</td>
<td></td>
</tr>
<tr>
<td>serial number is on a per-game basis).</td>
<td></td>
</tr>
<tr>
<td>8. Must have an electronic flare that displays the logo, game name,</td>
<td></td>
</tr>
<tr>
<td>ticket price, ticket count, form number, serial number, predetermined</td>
<td></td>
</tr>
<tr>
<td>finite number of tickets in the game, winning combinations with</td>
<td></td>
</tr>
<tr>
<td>quantities of winners and prize tier(s), bonus screens, and plays not</td>
<td></td>
</tr>
<tr>
<td>included in the ticket count, but must not display game status. All base</td>
<td></td>
</tr>
<tr>
<td>game tickets must be identical across all deals of that form number.</td>
<td></td>
</tr>
<tr>
<td>Potential chance prizes must be available as shown on the flare, which</td>
<td></td>
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<tr>
<td>must state that chances for multiple choice games may contain a prize</td>
<td></td>
</tr>
<tr>
<td>greater than, equal to, or lesser than the qualifying winning ticket.</td>
<td></td>
</tr>
<tr>
<td>9. Must have no spinning reels or other representations that mimic a</td>
<td></td>
</tr>
<tr>
<td>video slot machine, i.e. non-straight-line wins or scatter pay.</td>
<td></td>
</tr>
<tr>
<td>10. The maximum prize which may be awarded for any single pull-tab is</td>
<td></td>
</tr>
<tr>
<td>$599 for $2 and under pull-tabs, $899 for $3 pull-tabs, $1,199 for $4</td>
<td></td>
</tr>
<tr>
<td>pull-tabs, and $1,499 for $5 pull-tabs, not including any cumulative or</td>
<td></td>
</tr>
<tr>
<td>carryover prizes. Cumulative or carryover prizes in a pull-tab game shall</td>
<td></td>
</tr>
<tr>
<td>not exceed $2,500. An organization may not sell any pull-tab for more than</td>
<td></td>
</tr>
<tr>
<td>$5.</td>
<td></td>
</tr>
</tbody>
</table>
11. A pull-tab game may not contain an ideal prize payout of greater than 85%.

12. Electronic multiple chance games must include a feature where the player must accept or forfeit the prize for a chance of a prize greater than, equal to, or lesser than the qualifying ticket being forfeited.

13. Electronic multiple chance games must indicate how a player makes a selection on the screen showing the chance and that the chance prize may be greater than, equal to, or lesser than the qualifying winning ticket being forfeited.

**ELECTRONIC PROGRESSIVE PULL-TAB GAME REQUIREMENTS**

7864.0235, s. 5c

1. Must contain the same game name and form number, but different serial numbers for each deal. Each deal must be designated as such (i.e. 1 of 12, 2 of 12, etc.).

2. All tickets must be randomly distributed throughout all deals.

3. Each ticket or deal in an electronic progressive pull-tab game must contribute to the jackpot. The contribution from ticket to ticket and from deal to deal toward the progressive jackpot must be the same. When the progressive jackpot reaches the amount listed on the flare, up to the prize limit contained in Minnesota Statutes, § 349.211, Subdivision 2a, no additional contribution may be made to the progressive jackpot.

4. Only the progressive prize-winning ticket may be paid from the jackpot contribution prize pool.

5. Electronic progressive pull-tab deals and games may not provide for an ideal payout of greater than 85% of the ideal gross receipts.

6. Electronic progressive pull-tab deals may not be commingled.

**ELECTRONIC PULL-TAB GAME SYSTEM REQUIREMENTS**

Includes but is not limited to the server system, gaming devices, ports, games, and any related hardware or software necessary to conduct gaming operation.

349.12, s. 12d; 7864.0235, s. 7b

1. The system must contain a point-of-sale station.

2. All pull-tab game systems must automatically close and update all site activity from previous day to the central server by 2:30 a.m. central standard time.

**GAME INFORMATION**

Prior to the commencement of an electronic pull-tab game, the following data must be maintained and be viewable electronically on the electronic pull-tab game.

7864.0235, s. 18

1. A unique form number identifying each game.

2. A description of the game sufficient to categorize the game relative to other games.

3. The total number of electronic tickets in the game.

4. The ideal payout percentage for the game and the number of electronic tickets at each award amount.

5. The purchase price per electronic ticket assigned to the game.

6. Flare information listing quantity and denominations of winning tickets for the base game and all possible outcomes of bonus games, and a total for the entire game.

7. Bonus play, if any.

8. No information regarding the finite details or status of an electronic pull-tab game in play or the criteria used to determine when a game will be closed may be provided to players except to notify players of an automatic game close feature.

9. Electronic pull-tab games may contain animated win determinations but displays must not simulate spinning reels or nonstraight win line graphic representations.

10. Any explanation necessary for players to understand the game.

**INITIAL SCREEN REQUIREMENTS**

7864.0235, s. 2

1. The manufacturer’s logo.

2. The compulsive gambling hotline telephone number.

3. All Board-approved electronic pull-tab games available for play.

4. Electronic linked bingo games, if applicable.
### ELECTRONIC PULL-TAB FLARE REQUIREMENTS

5. The base game flare must contain only:
   a. The manufacturer's name or Board-registered logo.
   b. The game name and serial number, which must be identical to the same information that appears on the tickets in the deal.
   c. The unique form number for that game.
   d. The ticket count.
   e. The prize structure, including the quantity of symbols or numbers for winning tickets by denomination with their respective winning symbol or number combinations. The prize amounts may not exceed the limit under Minn. Stat. § 349.211.
   f. The cost per play, not to exceed the limit under Minn. Stat. § 349.211.
   g. The game flare must provide notice that a game may close at any time prior to auto close conditions being met, if any.

6. No information regarding the status of an electronic pull-tab game in play or on the criteria used to determine when a game will be closed may be provided to players on the game flare or in any other manner with the following exceptions:
   a. The date the game was placed into play may be provided on the game flare.
   b. If the game is preprogrammed to automatically close, a statement may be displayed on the electronic pull-tab game flare stating that at least one major prize, as defined Minnesota Statutes, § 349.172, Subdivision 4, remains in the deal.

7. The progressive pull-tab game flare must also contain:
   a. The deal number sequence indicating the deal number and the total number of deals in the progressive game (for example, deal 4 of 12).
   b. The progressive jackpot prize amount.
   c. The number of qualifying tickets that award players a chance to win the progressive jackpot prize.
   d. The maximum amount to be contributed to the progressive jackpot from each ticket or deal in the game.

8. The bonus game flare must contain:
   a. The manufacturer's name or Board-registered logo.
   b. The game name.
   c. The ticket price.
   d. The number of bonus plays.
   e. The quantity and denominations of bonus plays.
   f. The form number.

9. The summary flare must contain:
   a. The manufacturer's name or Board-registered logo.
   b. The game name.
   c. The ticket price.
   d. The combined total quantity and denominations of tickets and bonus plays.
   e. The form number.

10. If there is no bonus play, the base game flare information is sufficient.

### ELECTRONIC PULL-TAB TICKET REQUIREMENTS

1. Manufacturer's name or its Board-registered logo.
2. The game name, which must be identical to the game name on the flare for that deal.
3. The game serial number, which must be a minimum of five and a maximum of eight characters and must not be repeated on gambling equipment of the same form number for 3½ years from the date of the manufacturer's invoice to the distributor. There must not be more than one serial number in a deal.
4. The unique form number for that game.
5. Cost per play, not to exceed the limit under Minn. Stat. § 349.211.

6. The quantity of winners and bonus plays in each tier, and the respective winning numbers or symbols and prize amount.

7. The ability to access the base and bonus flare information.

8. The player account balance.

9. Primary and secondary win indicators.

10. A defined area on the face of the ticket for the windows or seals covering the numbers or symbols.

11. Winning numbers or symbols in a straight, consecutive pattern under the windows or seals.

12. A bonus symbol must be connected to a straight-line win to trigger bonus play.

13. For winning tickets, the symbol combination for each denomination must be identical in the base game for all deals within that form number.

14. A winning ticket which includes a bonus prize must not exceed statutory prize limits under Minn. Stat. § 349.211.

15. Qualifying bonus and free play symbols are considered winning symbols on a ticket regardless of the outcome of the bonus or free play.

BONUS SCREEN REQUIREMENTS 7864.0235, s. 5

1. Manufacturer’s name or Board-registered logo.

2. Game name.

3. Form number.

4. Seal or animation.

5. The number of seals to select.


7. The total win amount from bonus prizes.

APPLICATION SOFTWARE

All application software must be owned by the manufacturer. Software developed by the manufacturer must also meet these requirements. 7864.0235, s. 6

1. For purposes of these standards, application software is developed by the manufacturer if the manufacturer designs the central system, database, user interface, the program architecture, and programs the source code.

2. Application software must be designed to accommodate assistive technology. Assistive technology is any item, piece of equipment, software program or product system that is used to increase, maintain, or improve the functional capabilities of persons with disabilities.

3. A licensed manufacturer may jointly develop application software for an electronic linked bingo system or an electronic pull-tab system with a licensed linked bingo game provider if the jointly developed application software permits the operation of electronic linked bingo or electronic pull-tab games on the same electronic linked bingo or electronic pull-tab device.

4. Any application software to be used by the manufacturer must be wholly owned free and clear and without any further obligation or condition by any entity other than the licensed manufacturer.

5. The electronic pull-tab game system manufacturer must provide documentation establishing ownership of the intellectual property rights to the entire game application software and system.

CHANGES IN SOFTWARE OR HARDWARE 7864.0235, s. 7

If there is any change in software or hardware by a manufacturer, the manufacturer must assign a new version or code build number and must submit the new software version or code build number to the director for review, and if required by the director, the game or equipment must be submitted for review and approval by the board. The new version or code build number must be approved by a certified independent testing laboratory.
SAME VERSION, UPDATES 7864.0235, s. 7a

| 1. | A manufacturer's installed software and system versions must be identical at all lawful gambling sites. |
| 2. | A manufacturer's electronic pull-tab devices must operate on the same version of an installed software. When upgrading pull-tab device software, all devices must be on the same version of all installed software within three days of the first installed upgrade. |

ELECTRONIC MONITORING BY BOARD 7864.0235, s. 8

Electronic monitoring of the operation of the electronic pull-tab system by the Board will be limited to read-only access of transaction logs and status of the system. The Board is not allowed to alter any data or game play.

SECURED DATA TRANSMISSION 7864.0235, s. 9

| 1. | An electronic pull-tab game system must provide secured data transmission to all participating locations. |
| 2. | Separate computing communications methods are required for each linked bingo game provider and each manufacturer. All data for each linked bingo game provider and manufacturer must be secure, separate from and inaccessible to other linked bingo game providers and manufacturers. |

CHANGES IN VERSION OF SYSTEM OR GAME 7864.0235, s. 10

| 1. | If there is a change in the version or code build number of a system or game, the manufacturer must assign a new version or code build number for any changes or upgrades to the electronic pull-tab system or game to indicate a change of the version or code build number of the system or game according to standard practices. |
| 2. | Any changes to the electronic pull-tab game or system must be approved by the director before the game or system is placed into operation. |
| 3. | Any changes in a version or code build number that have an effect on the outcome of a previously approved game must be retested by a certified independent testing laboratory. |

SECURE COMMUNICATION 7864.0235, s. 11

| 1. | Connections between all components of the electronic game system must only be through the use of secure communication protocols which are designed to prevent unauthorized access or tampering, employing: |
| a. | Advanced Encryption Standard (AES) specifications as defined by the National Institute of Standards and Technology (NIST); and |
| b. | IEEE 802.11 standards contained in the WPA2 authentication protocols. |

COMMUNICATIONS NETWORK 349.18, s. 1; 7861.0210, s. 11b

“Communications network” means an Internet-based communications system used for the data transfer of all transactions associated with the conduct of electronic games. For lawful gambling purposes, communications network includes data transmission service and equipment required to provide the Internet signal at the lawful gambling premises up to the first piece of equipment required at the point-of-sale system maintained by the licensed organization as part of an approved electronic gaming system. The lessor is responsible for the cost of any communications network or service required to conduct electronic pull-tab games.

INDEPENDENT VERIFICATION CHECK 7864.0235, s. 12

The electronic pull-tab game system and all devices that communicate with the electronic pull-tab game system must have the ability to allow for an independent verification check of the system's software from an authorized source approved by the Board. The independent verification check ability is required for all application software that the Board determines may affect the integrity of the game. The verification check must provide a means for on-site and off-site field verification of the software and applicable device to identify and validate the program including user-acceptance testing and quality assurance required under Minnesota Rule 7864.0235, subpart 38.

All Minnesota Board-approved games must be identical to the games presented to a certified independent testing laboratory.

ELECTRONIC ACCOUNTING DATA 7864.0235, s. 13

Electronic accounting data must be at least ten digits in length and must be maintained in credit units equal to dollars and cents.
### CASH AND INVENTORY VERIFICATION

<table>
<thead>
<tr>
<th>7864.0235, s. 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>The system must record value of cash in, tickets played, credits won, credits played, cash out, and unredeemed credits.</td>
</tr>
</tbody>
</table>

### RESTRICTED USE

<table>
<thead>
<tr>
<th>7864.0235, s. 15</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Individual components of an electronic pull-tab game system must not be capable of being used as stand-alone units for the purposes of engaging in any function or use not permitted by these standards at any time.</td>
</tr>
<tr>
<td>2. External ports on the device, if any, will be secured or disabled from unauthorized use.</td>
</tr>
<tr>
<td>3. No component of an electronic pull-tab system may retain any player information after the player has returned the device to the seller.</td>
</tr>
</tbody>
</table>

### MEMORY BACKUP

<table>
<thead>
<tr>
<th>7861.0285, s. 5; 7864.0235, s. 16</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Central servers must have nonvolatile backup memory or its equivalent, that must be maintained in a secure compartment on each central server for storing and preserving a redundant set of critical data that include the following.</td>
</tr>
<tr>
<td>2. Error corrections that may have occurred on electronic pull-tab game systems or central servers, such as an invalid PIN or a game interrupt.</td>
</tr>
<tr>
<td>3. Program error check and verification and authentication of any mismatch.</td>
</tr>
<tr>
<td>4. Recall of all wagers and other play information associated with the last 100 plays on each device, including the electronic pull-tab ticket and the serial number of the game.</td>
</tr>
<tr>
<td>5. Electronic accounting data capturing the record of transactions for electronic pull-tab devices in use for each central server including:</td>
</tr>
<tr>
<td>a. current credits;</td>
</tr>
<tr>
<td>b. electronic device and game configuration data;</td>
</tr>
<tr>
<td>c. software state (the last normal state or last status before interruption); and</td>
</tr>
<tr>
<td>d. a log of the last 100 transactions on each device.</td>
</tr>
<tr>
<td>6. Comprehensive checks of critical memory for each device in operation following game initiation but prior to display of game outcome to the player. An unrecoverable corruption of critical memory must result in an error notification and cause all electronic pull-tab devices in play to cease further function. An unrecoverable critical memory error report must be immediately generated to the Gambling Control Board and must include the name of the authorized person who performs any recapture or memory clear of the central server.</td>
</tr>
<tr>
<td>7. The system must have the ability to immediately, accurately, and securely cash out all players who have funds in the system in the event of power or communications network loss or other time of game or play interruption.</td>
</tr>
<tr>
<td>8. All game play records must be kept for 3½ years.</td>
</tr>
</tbody>
</table>

### RANDOMIZATION

<table>
<thead>
<tr>
<th>7861.0210, s. 44; 7864.0235, s. 17</th>
</tr>
</thead>
<tbody>
<tr>
<td>An electronic pull-tab game system must use randomizing procedures in the distribution of electronic pull-tabs. The randomizing process for each pull-tab game must take place prior to the use of the game at the sales location. &quot;Pull-tab position&quot; means the first pull-tab dealt, second pull-tab dealt, in sequential order. Any random number generation, shuffling, or randomization of outcomes used in connection with an electronic pull-tab system must be by use of a random number generation application that has successfully passed standard tests for randomness and unpredictability as defined in Minnesota Rule 7861.0210, subpart 44, as follows:</td>
</tr>
<tr>
<td>1. &quot;Random number generator&quot; means a device that has an automated method of selecting game symbols or producing game outcomes based on a preset number of chances available for random selection, which must:</td>
</tr>
<tr>
<td>a. be statistically independent;</td>
</tr>
<tr>
<td>b. conform to the desired random distribution;</td>
</tr>
<tr>
<td>c. pass various recognized statistical tests as identified in #2 below;</td>
</tr>
<tr>
<td>d. allow for each possible permutation of game elements that produces winning or losing game outcomes to be available for random selection at the initiation of each play, unless otherwise denoted by the game; and</td>
</tr>
</tbody>
</table>
e. not make a variable secondary decision that affects the result shown to the player, such as the random number generator choosing an outcome that the game will be a loser.

2. The random number generator and random selection process must be impervious to electromagnetic interference, electrostatic interference, radio frequency interference, and other influences from outside the system or device that may affect the game outcome. Recognized statistical tests used to determine whether or not the random values produced by the random number generator pass the desired confidence level of 99% include:
   a. chi-square test;
   b. equi-distribution (frequency) test;
   c. gap test;
   d. overlaps test;
   e. poker test;
   f. coupon collector's test;
   g. permutation test;
   h. Kolmogorov-Smirnov test;
   i. adjacency criterion tests;
   j. order statistic test;
   k. run tests (patterns of occurrences should not be recurrent);
   l. correlation test;
   m. tests on subsequences;
   n. Poisson distribution; and
   o. other recognized statistical tests determining the desired 99% confidence level.

**ELECTRONIC PULL-TAB GENERATION** 7864.0235, s. 19

Upon request from a pull-tab device, the electronic pull-tab system must display an electronic facsimile of a pull-tab ticket. Once dispensed, such ticket must not be reused.

**SYSTEM TESTING AT SITES** 7864.0235, s. 20

The communications network system must be available for testing and have the capability of being tested by the Board on site.

**DATA ACCESS BY BOARD** 7864.0235, s. 21

The system must include on-demand remote access at all times by the Board to all electronic reporting data without participation of the manufacturer or the distributor.

**GAME AUDITING** 7864.0235, s. 22

1. Only upon the game termination shall the finite details of that game be revealed. “Finite details” means the number of tickets played, the number of winning tickets revealed, the denominations of prizes paid or remaining, and the number of tickets remaining to be played.

2. If a manual audit or other game determination by organization employees or volunteers is conducted while a game is in play, termination of the entire game must immediately occur. An audit or game determination includes a determination of how many winning tickets remain in a game or the individual prizes won or individual prizes remaining to be won.

3. The organization's gambling manager may choose an automatic game close feature before putting games into play. “Automatic game close” or “auto close” means an automated program, approved by the board, that applies chosen parameters, selected by the gambling manager, used to determine whether to close a game in play. The parameters may trigger a game to close during or after business hours.

4. Daily reports will be made available to the licensed organization's authorized personnel that contain data relating to gross ticket sales and gross prizes paid on a per-game basis.

5. An electronic pull-tab game system must allow for the early, or manual, termination of games as determined by the licensed organization's authorized personnel. “Manual game close” means a real-time command by the gambling manager or authorized organization member to close a game and permanently end ticket sales for that game.
6. Access to the reporting portal must be secure and limited only to the gambling manager, authorized organization members who are not sellers, the organization’s accountant, and the licensed distributor that leased the electronic game system to the organization. Access to the portal requires a unique identifying code and password for each individual user.
   a. Sellers must not have reporting portal access.
   b. The persons identified in this item may only view the daily and overall activity totals for gross receipts, prizes paid, net receipts, unredeemed credits, cash in, cash out, and payout percentage for games in play.
   c. Any individual with access to the reporting portal may not play electronic games.

GAME DEFINITION

1. All game definition files must contain the following information:
   a. game ID;
   b. game type;
   c. game version;
   d. Manufacturer;
   e. game name;
   f. form number;
   g. purchase price per electronic ticket;
   h. game ticket count; and
   i. prize values with an associated index and frequency associated with how many of that particular prize exist.

ELECTRONIC PULL-TAB REQUIREMENTS AND RESTRICTIONS

1. The use of any electronic pull-tab device may only be at a permitted premises that is:
   a. a premises licensed for the on-sale of intoxicating liquor or on-sale 3.2 percent malt beverages; or
   b. a premises where bingo is conducted as the primary business and has a seating capacity of at least 100; and
   c. where a licensed organization sells paper pull-tabs and consents to the conduct of electronic pull-tab devices on the premises.

2. The number of electronic pull-tab devices is limited to:
   a. no more than six devices in play at any permitted premises with 200 seats or less;
   b. no more than 12 devices in play at any permitted premises with 201 seats or more; and
   c. no more than 50 devices in play at any permitted premises where the primary business is bingo.

3. The hours of operation for the devices are limited to 8:00 a.m. to 2:00 a.m.

4. All electronic pull-tab games must be sold and played on the permitted premises and may not be linked to other permitted premises.

5. Electronic pull-tab games may not be transferred electronically or otherwise to any other location by the licensed organization.

6. Electronic pull-tab games may be commingled if the games are from the same family of games and manufacturer and contain the same game name, form number, type of game, ticket count, prize amounts, and prize denominations. Each commingled game must have a unique serial number. No more than two electronic pull-tab games may be commingled.

7. An organization may remove from play a device that a player has not maintained in an activated mode for a specified period of time determined by the organization. The organization must provide the notice in its house rules. All credits maintained on the device when removed from play may be redeemed by the player or used for play upon reactivation.

8. Before participating in the play of an electronic pull-tab game, a player must present and register a valid picture identification card that includes the player's address and date of birth.

9. Each player is limited to the use of one device at a time.
### SYSTEM SECURITY AND ACCESS

7861.0210, s. 44a; 7864.0235, s. 24, 34

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<tbody>
<tr>
<td>1.</td>
<td>The electronic pull-tab game system must be located in Minnesota and in a secure location with limited, authorized access.</td>
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<tr>
<td>2.</td>
<td>Any system elements that hold game data, other than the electronic pull-tab devices, must be in a locked area or in a locked case or compartment with access limited to designated personnel.</td>
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<tr>
<td>3.</td>
<td>The manufacturer must register employees having authorized system access with the Board.</td>
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<tr>
<td>4.</td>
<td>The system must be in a secure location and provide electronic security for the games against alteration, tampering, or unauthorized access.</td>
</tr>
<tr>
<td>5.</td>
<td>The system must allow the Board and other authorized state representatives real-time access to data and equipment, including all accounting for sales, prizes, and credits per device, per site. Real time means within five seconds of initiation.</td>
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<tr>
<td>6.</td>
<td>All systems must require VPN or SSL encrypted tunneling protocols unless other approved by the Board.</td>
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### DATA ALTERATION

7864.0235, s. 25

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<tbody>
<tr>
<td>1.</td>
<td>The electronic pull-tab game system must not permit the alteration of any accounting or significant event log information that was communicated from the electronic pull-tab device without Board-approved access controls.</td>
</tr>
<tr>
<td>2.</td>
<td>In the event financial data is changed, the electronic pull-tab system must be able to produce an automated audit log documenting the following:</td>
</tr>
<tr>
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<td>a. data element altered;</td>
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<td>b. data element value prior to alteration;</td>
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<td></td>
<td>c. data element value after alteration;</td>
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<td></td>
<td>d. time and date of alteration; and</td>
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<td></td>
<td>e. user log-in of personnel that performed alteration.</td>
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### BACKUP AND RECOVERY

7891.0285, s. 5; 7864.0235, s. 26

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<tbody>
<tr>
<td>1.</td>
<td>An electronic pull-tab system must have a separate physical medium for securely storing games on the computer, which must be backed up in real time by a backup medium.</td>
</tr>
<tr>
<td>2.</td>
<td>A disaster recovery plan detailing the system backup features including physical location for medium storage and procedures for periodic testing and recovery must be provided to the Board as a condition of equipment approval.</td>
</tr>
<tr>
<td>3.</td>
<td>All data required to be available or reported must be retained for a period of not less than 3½ years.</td>
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<tr>
<td>4.</td>
<td>All storage of critical data must use error checking and be stored on a nonvolatile physical medium.</td>
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<tr>
<td>5.</td>
<td>The database must be stored on redundant media so that no single failure of any portion of the system would result in the loss or corruption of data.</td>
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<tr>
<td>6.</td>
<td>In the event of a catastrophic failure when the electronic pull-tab game system cannot be restarted in any other way, it must be possible to reload the electronic pull-tab game system from the last viable backup point and fully recover the contents of that backup, to consist of at least the following information:</td>
</tr>
<tr>
<td></td>
<td>a. all date and time indicators associated with data failure and pull-tab game system reload;</td>
</tr>
<tr>
<td></td>
<td>b. all accounting information;</td>
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<tr>
<td></td>
<td>c. auditing information, including all open games and the summary of completed games; and</td>
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<tr>
<td></td>
<td>d. employee files with access levels.</td>
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### SYSTEM ACCESS; PASSWORD REQUIREMENTS

7864.0235, s. 27

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<tr>
<td>1.</td>
<td>The manufacturer must maintain password access for the manufacturer; the distributor must maintain password access for the distributor; and the organization must maintain password access for the gambling manager and sellers.</td>
</tr>
<tr>
<td>2.</td>
<td>The operating system software and application software must have multiple security access levels to control and restrict different classes of access to the system. The accounts for the access levels must be unique when assigned to the authorized personnel and only one user per account is allowed.</td>
</tr>
<tr>
<td>3.</td>
<td>The manufacturer, the distributor, and the organization must register employees and volunteers with authorized system access with the Board.</td>
</tr>
</tbody>
</table>
4. The operating system software and application software must provide comprehensive password security or other secure means of ensuring data integrity and enforcing user permission. It is required that:

   a. All programs and data files must only be accessible via the entry of passwords, that will be known only to the manufacturer, distributor, and gambling manager, based on respective level-of-access criteria.

   b. The storage of passwords must be in an encrypted, nonreversible form.

   c. A program must be available that will list all registered users on the system including their privilege level.

   d. The password must have a length of at least six alphanumeric characters.

   e. The system must automatically log out after a period of inactivity in excess of five minutes.

**SYSTEM LOG-IN AND LOG-OUT REQUIREMENTS**

Applies to manufacturers, distributors, gambling managers, assistant gambling managers, sellers and volunteers.

Access to an electronic game system requires a password log-in with two factor authentication (2FA) comprised of a personal identification code and a personal password. System log-in and log-out requirements apply to manufacturers, distributors, gambling managers, assistant gambling managers, users authorized by the gambling manager, sellers, and volunteers.

**TIME SIGNATURE**

The time signature generated by the electronic game system and the central server must be identical.

**ELECTRONIC ACCOUNTING AND REPORTING; RECORD OF DAILY SYSTEM TRANSACTIONS**

1. One or more electronic accounting systems must perform reporting and other functions in support of the electronic pull-tab game system. A manufacturer may enhance its accounting system, with director approval, for innovation in lawful gambling reporting. The electronic accounting system must not interfere with the outcome of any gaming function.

2. A database containing a permanent record of daily transactions played on the electronic pull-tab system and device must be maintained by the electronic pull-tab game system on the central server. The database and central server must be accessible to the Gambling Control Board at all times.

**POINT-OF-SALE SYSTEM REQUIREMENTS**

1. The point-of-sale system used for the conduct of electronic games must require entry of the sellers unique identifying code to open the point-of-sale system.

2. The point-of-sale system must record the unique identifying code of any person making any transaction at any time. The user list naming each seller with the seller’s unique identifying code must be available on the manufacturer’s portal.

3. The point-of-sale system must be capable of immediately producing an electronic game occasion report, using the prescribed terminology, that includes the following information:

   a. Electronic pull-tab gross receipts.

   b. Electronic linked bingo gross receipts, if applicable.

   c. Total electronic pull-tab prizes awarded at premises.

   d. Total electronic linked bingo prizes paid at premises, if applicable.

   e. Total value of credits purchased.

   f. Total value of credits redeemed.

   g. Electronic net value of credits.

   h. Total value of unredeemed credits.

4. The point of sale may only include game-related transactions.

5. The system must automatically log out after a period of inactivity in excess of five minutes.
1. An electronic pull-tab game report must be available on demand for each game currently in play containing the following information:
   a. A unique serial number identifying each game.
   b. A description of the game sufficient to categorize the game relative to other games.
   c. The total number of electronic pull-tab tickets in the game.
   d. The actual payout percentage of the entire game.
   e. Cost per electronic pull-tab ticket assigned to the game.
   f. The time and date that the game became available for play.
   g. The location where the game is being played.
   h. A seller may not have access to outcomes or prizes for games in play.

2. An electronic pull-tab game report must be available on demand for each completed game. The report must contain the following information:
   a. A unique serial number identifying each game.
   b. A description of the game sufficient to categorize the game relative to other games.
   c. The total number of unsold electronic pull-tab tickets per game.
   d. The total number of electronic pull-tabs purchased.
   e. Prizes awarded.
   f. The time and date that the game became available for play.
   g. Net receipts.
   h. The time and date that the game was completed or removed from play.
   i. The location where the game was played.
   j. The final payout percentage of the game when removed from play.
   k. The purchase price per electronic pull-tab ticket assigned to the game.

3. Other electronic pull-tab game reports that must be available on demand are:
   a. Up-to-date active site reports containing:
      (1) site name, address, and telephone number;
      (2) licensed organization name and license number;
      (3) premises permit number and number of devices at site; and
      (4) the version or code build number of the current software.
      The reports must be able to distinguish sites that are not active.
   b. Sales reports which must provide:
      (1) daily activity by site, by organization, and by distributor for all active sites;
      (2) site name and license number;
      (3) premises permit number;
      (4) number of devices in use at the site;
      (5) pull-tab tickets sold and the gross receipts;
      (6) prizes awarded;
      (7) net receipts;
      (8) payout percentage;
      (9) actual cash sales (dollar amount);
      (10) actual cash redeemed (dollar amount);
      (11) unredeemed cash credits; and
      (12) the cumulative amount of net receipts available for deposit at the end of each electronic game occasion.
   c. Month-end reports for each site, including:
(1) all daily sales activity;
(2) detail of all games closed during the month and status of games remaining in play; and
(3) the number of tickets sold, prizes paid, and net receipts.

d. Inventory reports, which must:
(1) provide for game tracking from game creation to distribution, to game play, and to game close. Detail must include:
   a) game name;
   b) game model;
   c) serial number;
   d) date created;
   e) site assigned;
   f) date in play; and
   g) date removed from play.
(2) contain current site inventory, if any, including:
   a) games in play;
   b) unplayed games; and
   c) closed games.
(3) contain month-end reports for each site showing:
   a) games received;
   b) games put into play; and
   c) games removed from play.

e. Games purchased, sold, and maintained by distributor.

f. Real-time site activity report with the ability to:
(1) view game play activity in real time at each site without disruption or knowledge of the seller.
(2) view each active device noting:
   a) device number;
   b) current credits; and
   c) game being played; and
(3) view each transaction with date and time stamp, including:
   a) seller log-in and log-off;
   b) device load;
   c) game play;
   d) device credits redeemed; and
   e) any malfunction or misplay.

g. System user list including:
(1) full name of sellers, assistant gaming managers, gambling manager, board investigators, manufacturer personnel and distributor personnel and their unique identifying codes;
(2) position (seller, assistant gambling manager, gambling manager, distributor, manufacturer, or Gambling Control Board investigator);
(3) site name, organization name, or other description;
(4) unique identifying codes of all persons with system access;
(5) access level; and
(6) contact telephone number and email.

h. Point-of-sale reports. A seller's system access must be limited to the following information within the end of shift reports and end of day reports:
(1) gross receipts;
(2) prizes paid; and
(3) net receipts.
4. By the tenth day of each month, the distributor must provide an invoice to the organization that includes at least the following information using the prescribed terminology for the previous month’s electronic pull-tab activity at each premises:

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<tbody>
<tr>
<td>a.</td>
<td>the electronic pull-tab gross receipts;</td>
</tr>
<tr>
<td>b.</td>
<td>the electronic pull-tab prizes awarded at premises;</td>
</tr>
<tr>
<td>c.</td>
<td>the electronic pull-tab prizes paid by check;</td>
</tr>
<tr>
<td>d.</td>
<td>the electronic pull-tab net receipts;</td>
</tr>
<tr>
<td>e.</td>
<td>the electronic pull-tab manufacturer’s fee, which must list both as a percentage of electronic pull-tabs net receipts and as an amount to be paid by the organization; and</td>
</tr>
<tr>
<td>f.</td>
<td>the line numbers where these amounts are to be reported on the organization’s monthly reports to the board.</td>
</tr>
</tbody>
</table>

5. Other statistical and activity reports as required by the Board and maintained by the manufacturer and the distributor must be provided in a format prescribed by the Board upon request.

6. Historical data from all sites, both active and inactive, must be available to the board as follows:

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<tr>
<td>a.</td>
<td>the most recent data must be available on the manufacturer’s portal for at least 3½ years;</td>
</tr>
<tr>
<td>b.</td>
<td>archived data or data older than 3½ years must be transferred to the board in a format prescribed by the board; and</td>
</tr>
<tr>
<td>c.</td>
<td>all electronic pull-tab game information, including game sales and report data, must be searchable by the board and recorded in a manner that allows it to be electronically transmitted upon demand by the board and at the expense of the manufacturer.</td>
</tr>
</tbody>
</table>

### TEST SYSTEM AND EQUIPMENT

7864.0235, s. 32

Manufacturers must provide a test system and equipment to the Gambling Control Board, at the manufacturer’s expense, to test pending and approved games.

### TEST SOFTWARE

7864.0235, s. 33

1. Manufacturers must provide identical software to the Board as part of system approval by an independent testing laboratory and must disable the ability to write to the hard drive.

2. Manufacturers must allow regulatory test software to be added to an electronic game system to verify approved product.

### ELECTRONIC GAME SYSTEM

7864.0235, s. 34

1. Each component of an electronic game system must function as indicated by the communication protocol implemented by the licensed manufacturer of the electronic pull-tab game system.

2. All communication between the central server and the electronic pull-tab devices must use authentication and encryption protection employing Advanced Encryption Standard (AES) specifications as defined by the National Institute of Standards and Technology (NIST) and the IEEE 802.11 standards contained in the Wi-Fi Protected Access II (WPA2) authentication protocols to provide secure authentication of the device and the server, ensuring the integrity of the data communicated, and for confidentiality.

3. The communicated data must be encrypted. The certified testing laboratory must examine each submitted electronic game system to ensure that the proposed field configuration is secure. The certified testing laboratory may provide additional security recommendations to maintain the integrity of the configuration.

4. The electronic game system must be capable of being tested by the Board to verify approved product.

### ELECTRONIC GAME SYSTEM SECURITY

7864.0235, s. 35

1. The electronic game system security must be designed or programmed in such a way that it may only communicate with authorized electronic devices using a non-broadcasting encrypted system.

2. The electronic game system security must include the ability to automatically disable an electronic pull-tab device if the device goes beyond a physical property restriction at a sales location. The device must remain disabled until reactivated at the point of sale.

3. The electronic game system must be secure from all other site communication systems and users at a gambling site.
**FIREWALL PROTECTION** 7864.0235, s. 36

1. Communications must pass through at least one application-level firewall recognized by the certified testing laboratory. Redundant communications methods are allowed if equally protected by a firewall. Each manufacturer and linked bingo provider shall implement and maintain their own communications methods, including any redundancy, separate from other manufacturers and linked bingo providers. The firewall application must maintain an audit log of the following information and must disable all communications if unauthorized access is detected:

   a. all changes to configuration of the firewall;
   b. all successful and unsuccessful connection attempts through the firewall; and
   c. the source and destination IP addresses and port numbers.

**REMOTE ACCESS** 7864.0235, s. 37

1. Where permitted by the Board, remote access must authenticate all computer systems based on the authorized settings or firewall application. The following are additional requirements:

   a. No unauthorized remote user administration functionality.
   b. No unauthorized access to any database other than information retrieval using existing functions.
   c. No unauthorized access to the operating system and application software.
   d. Maintenance of an activity log that includes:
      (1) the IP address where any change originated;
      (2) log-in name;
      (3) time and date the connection was made;
      (4) duration of connections;
      (5) activity while logged in, including the specific areas accessed and changes made; and
      (6) accurate time and date on all components of each system at each site.

**OTHER FEATURES/FINDINGS:**

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**Minnesota Gambling Control Board**
1711 West County Road B, Suite 300 South Roseville MN 55113

651-539-1900

www.mn.gov/gcb