ELECTRONIC LINKED BINGO GAME SYSTEM STANDARDS AND REQUIREMENTS

Checklist

Manufacturing standards for the design and manufacture of:

- electronic linked bingo games
- electronic linked bingo devices
- electronic linked bingo 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 electronic linked bingo standards and requirements as established in Minnesota Statutes and Minnesota Rules and in conformance with game procedures as provided by the linked bingo game provider.

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; and

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

(Minn. Rules 7863.0260, Subp. 1a, Item L; 7863.0270, Subp. 36, Item H.)

Independent testing of electronic gambling equipment includes:

- electronic linked bingo game devices;
- programmable electronic devices;
- electronic linked bingo game systems;
- upgrades or changes to previously approved and tested equipment;
- other technical hardware devices used in conjunction with lawful gambling equipment; and
- software applications and version upgrades used in conjunction with lawful gambling equipment.

(Minn. Rules 7863.0270, Subp. 36, Item I.)
### ELECTRONIC LINKED BINGO DEVICE REQUIREMENTS

(349.12, s. 12a; 7863.0270, s. 6a)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Must be handheld and portable.</td>
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<tr>
<td>2.</td>
<td>Must monitor a facsimile of bingo a paper sheet that is linked with other players.</td>
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<tr>
<td>3.</td>
<td>Must activate numbers as announced or displayed, and compare the numbers to the bingo faces previously stored in the memory of the device.</td>
</tr>
<tr>
<td>4.</td>
<td>Must identify a winning bingo pattern or game requirement.</td>
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<tr>
<td>5.</td>
<td>Must be able to play against other bingo players.</td>
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<tr>
<td>6.</td>
<td>May only be used for play against other bingo players in a bingo game.</td>
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<tr>
<td>7.</td>
<td>Must limit the play of bingo faces to 36 faces per game.</td>
</tr>
<tr>
<td>8.</td>
<td>Requires coded entry to activate play but does not allow the use of coin, currency, or tokens to be inserted to activate play. Coded entry may include manual entry by a player, use of a magnetic strip card or bar coded receipt provided at point of sale.</td>
</tr>
<tr>
<td>9.</td>
<td>Must have no additional function as an amusement or gambling device other than as an electronic pull-tab game.</td>
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<tr>
<td>10.</td>
<td>Must be capable of ensuring adequate levels of security internal controls.</td>
</tr>
<tr>
<td>11.</td>
<td>Must be capable of permitting the Board to electronically monitor the operation of the device and the internal accounting systems.</td>
</tr>
<tr>
<td>12.</td>
<td>Must have the capability to allow use by a player who is visually impaired.</td>
</tr>
<tr>
<td>13.</td>
<td>Devices must operate on the same version of all installed software.</td>
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</table>

### ELECTRONIC LINKED BINGO REQUIREMENTS AND RESTRICTIONS

(349.12, s. 5; 349.17, s. 9)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>The use of any electronic bingo device may only be at a permitted premises that is: a. premises licensed for the on-sale of intoxicating liquor or on-sale 3.2 percent malt beverages; or b. premises where bingo is conducted as the primary business and has a seating capacity of at least 100.</td>
</tr>
<tr>
<td>2.</td>
<td>The number of electronic bingo 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 bingo is the primary business. Seating capacity is determined as specified under the local fire code.</td>
</tr>
<tr>
<td>3.</td>
<td>Prior to a bingo occasion, the linked bingo game provider, on behalf of the participating organizations, must provide to the board a bingo program in a format prescribed by the board.</td>
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<tr>
<td>4.</td>
<td>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.</td>
</tr>
<tr>
<td>5.</td>
<td>Hours of active play for the devices are limited to the regular business hours for each location but shall not go beyond the time of 8:00 a.m. to 2:00 a.m. CST.</td>
</tr>
<tr>
<td>6.</td>
<td>An electronic linked bingo device may be issued to a player upon registration in the electronic linked bingo game system with valid picture ID that includes player's address and date of birth.</td>
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</tbody>
</table>

### ELECTRONIC LINKED BINGO GAME REQUIREMENTS

(349.12, s. 25a; 349.17, s. 6, 8; 349.211, s. 1a; 7863.0260, s. 2a C)

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Description</th>
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<tbody>
<tr>
<td>1.</td>
<td>Must be able to be played at two or more electronically linked locations.</td>
</tr>
<tr>
<td>2.</td>
<td>A winning bingo must be based on a predetermined pattern or game requirement and a matching pattern on a bingo face.</td>
</tr>
<tr>
<td>3.</td>
<td>Must have a common prize pool, awarded based on the number of bingo faces in play for each game.</td>
</tr>
</tbody>
</table>
1. Prior to the start of each game, the jackpot prize announcement is displayed on each device in play.

2. Must have a common selection of numbers or symbols conducted at one location, where the results of the number selections are transmitted to all participating locations by satellite, telephone, or other means by a linked bingo game provider.

3. Prize payment is made within three business days of verification of the winning bingo.

4. The price of a face played on an electronic bingo device may not be less than the price of a face on a bingo paper sheet sold for the same game at the same occasion.

5. A game of bingo begins with the first letter and number called or displayed.

6. Each player must cover, mark, or activate the numbers when bingo numbers are randomly selected and announced or displayed to the players.

7. The game is won when a player, using bingo paper, bingo hard card, or a facsimile of a bingo paper sheet, has completed, as described in the bingo program, a previously designated pattern or previously determined requirements of the game and declared bingo.

8. The game is completed when a winning card, sheet, or facsimile is verified and a prize awarded pursuant to subdivision 3.

9. Prizes for a linked bingo game shall be limited as follows:
   a. For linked bingo games played without electronic bingo devices, an organization may not contribute to a linked bingo game prize pool more than $400 per linked bingo game per site.
   b. For linked bingo games played exclusively with electronic bingo devices, an organization may not contribute more than 85% of the gross receipts per permitted premises to a linked bingo game prize pool.
   c. No organization may award more than $200 for a linked bingo game consolation prize. For purposes of this subdivision, a linked bingo game consolation prize is a prize awarded by an organization after a prize from the linked bingo prize pool has been won.
   d. For a progressive linked bingo game, if no player declares a valid bingo for a progressive prize or prizes based on a predetermined and posted win determination, a portion of the gross receipts may be carried over to another game until the accumulated progressive prize is won. The portion of the prize that is not carried over must be awarded to the first player or players who declares a valid bingo as additional numbers are called. If a valid bingo is declared, the entire prize pool for that game is awarded to the winner.
   e. For linked bingo games played exclusively with electronic bingo devices, linked bingo prizes in excess of $599 shall be paid by the linked bingo game provider to the player within three business days. Winners of linked bingo prizes in excess of $599 will be given a receipt or claim voucher as proof of a win.

10. A licensed organization may conduct or participate in linked bingo games, including progressive games in which a portion of the prize is carried over from one game to another until won by a player achieving a valid bingo based upon a predetermined and posted win determination.
### Application Software

All application software must be owned by the linked bingo game provider. Software developed by the linked bingo game provider must also meet these requirements.

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

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

3. Any application software to be used by the linked bingo game provider must be wholly owned free and clear and without any obligation or condition by any entity other than the licensed linked bingo game provider.

4. The linked bingo game provider must provide documentation establishing ownership of the intellectual property rights to the entire game application software and system.

### Changes in Software or Hardware

If there is any change in software or hardware by a linked bingo game provider, the linked bingo game provider must assign a new version or code build number and must submit the new software version or code build number to the Board for approval. The new version or code build number must be approved by a certified independent testing laboratory.

### Changes in Version of System or Game

1. If there is a change in the version or code build number of a system or game, the linked bingo game provider must assign a new version or code build number for any changes or upgrades to the electronic linked bingo system or game to indicate a change of the version or code build number of the system or game.

2. Any changes to the electronic linked bingo games 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.

### Independent Verification Check

The electronic linked bingo game system and all devices that communicate with the electronic linked bingo 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 devices to identify and validate the program. All Minnesota Board-approved games must be identical to the games presented to a certified independent testing laboratory.

### Electronic Accounting Data

Electronic accounting data must be at least ten digits in length and must be maintained in dollars and cents.

### Cash and Inventory Verification

The system must record value of bingo faces purchased and played, and prizes won.

### Restricted Use

1. Local and central servers and electronic linked bingo devices 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.

2. External ports on the device, if any, will be secured or disabled from unauthorized use.

### Memory Backup

Local and central servers must have nonvolatile backup memory or its equivalent, which must be maintained in a secure compartment on each local and central server for the purpose of storing and preserving a redundant set of critical data which include the following:

1. Error corrections that may have occurred on electronic linked bingo devices or local and central servers, such as an invalid PIN or a game interrupt.

2. Program error check and verification and authentication of any mismatch.
3. Recall of all wagers and other play information, such as electronic linked bingo face number, serial number, and permutation number of game, associated with all games in play and prior to closeout of daily activity.

4. Electronic accounting data capturing the record of transactions for electronic linked bingo devices in use for each local and central server including:
   a. bingo faces purchased and prizes won;
   b. electronic devices in play for each site;
   c. software state (the last normal state or last status before interruption); and
   d. a log of all current-day transactions prior to interruption.

5. Comprehensive checks of critical memory for each device in operation following game initiation including each specific bingo face in play, bingo numbers selected, and winner verification. An unrecoverable corruption of critical memory must result in an error notification and cause all electronic linked bingo 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 local or central server.

6. 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.

7. All game play records must be kept for 3-1/2 years.

Randomization (7861.0210, s. 44; 7863.0260, s. 1a G; 7863.0270, s. 15)

1. An electronic linked bingo game system must use randomizing procedures in the creation of games for electronic linked bingo faces that have been created using a method previously approved by the Board. “Face position” means the first bingo face dealt, second bingo face dealt, in sequential order, and “number position” means the first number drawn in sequential order.

2. Any random number generation, shuffling, or randomization of outcomes used in connection with an electronic linked bingo system must be by use of a random number generation application that has successfully passed standard tests for randomness and unpredictability as defined in part 7861.0210, subpart 44, as follows:

3. “Random number generator” 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:
   a. be statistically independent;
   b. conform to the desired random distribution;
   c. pass various recognized statistical tests as identified in #4 below;
   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
   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.

4. 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.
### Game Information on System

(7863.0260, s. 1a H, l, J; 7863.0270, s. 16)

<table>
<thead>
<tr>
<th>1.</th>
<th>Prior to the commencement of an electronic linked bingo game, the following data must be maintained and be viewable electronically on the electronic linked bingo game system:</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>A unique serial number identifying each game or session ID and each bingo face ID.</td>
</tr>
<tr>
<td>b.</td>
<td>A description of the game sufficient to categorize the game or session relative to other games or sessions.</td>
</tr>
<tr>
<td>c.</td>
<td>The jackpot prize for the game or session based on the number of electronic linked bingo faces in play for each game and the cost for each face.</td>
</tr>
<tr>
<td>d.</td>
<td>The purchase price per electronic linked bingo face assigned to the game or session.</td>
</tr>
</tbody>
</table>

2. The linked bingo game system must contain a means by which all bingo sheet perm numbers or electronic serial and face numbers are contained within the database for winning face identification.

3. The linked bingo game system must be able to verify winning serial and face numbers, determine if there is more than one bingo, verify that each called bingo is valid, and print a record of all selected numbers and each winning bingo face.

4. The linked bingo game system must possess a database of all bingo perms used in conjunction with the linked bingo game. The linked bingo game system must not allow changes or modifications to the bingo faces. Access to the database must be controlled by password authorization or another secure method.

5. The linked bingo game system must maintain an internal clock with current synchronized time for all components in 24-hour format and date. The clock must be able to provide:
   a. Time stamping of significant events, including all sales and draw events.
   b. Reference clock for reporting.

### Game Information on Device

(7863.0270, s. 17)

The following data must be maintained and be viewable electronically on the electronic linked bingo device:

1. The pattern.
2. The cost.
3. Confirmation that a game is active.
4. The estimated prize amount.
5. The number on the ball selected.
6. The number of balls called.
7. The site of the winner.

### Electronic Linked Bingo Face Generation

(7863.0270, s. 18)

<table>
<thead>
<tr>
<th>1.</th>
<th>Upon purchase initiation request from an electronic linked bingo device, the electronic linked bingo system must dispense an electronic facsimile of a bingo face.</th>
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</thead>
<tbody>
<tr>
<td>2.</td>
<td>Once dispensed, such face or outcome must not be reused until the bingo permutation is exhausted.</td>
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</tbody>
</table>

### Game Status and Auditing

(7863.0270, s. 19)

<table>
<thead>
<tr>
<th>1.</th>
<th>Only upon the game termination shall the finite details of that game be revealed to the persons performing the game audit or status check.</th>
</tr>
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<tbody>
<tr>
<td>2.</td>
<td>If an audit or other game determination 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 the prizes won or prizes remaining to be won.</td>
</tr>
</tbody>
</table>

### Game Definition

(7863.0270, s. 20)

<table>
<thead>
<tr>
<th>1.</th>
<th>All games and sessions contain the following information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Game ID.</td>
</tr>
<tr>
<td>3.</td>
<td>Game pattern type.</td>
</tr>
<tr>
<td>4.</td>
<td>Game version.</td>
</tr>
<tr>
<td>5.</td>
<td>Linked bingo game provider.</td>
</tr>
<tr>
<td>6.</td>
<td>Game name.</td>
</tr>
<tr>
<td>7.</td>
<td>Purchase price per electronic linked bingo face.</td>
</tr>
<tr>
<td>8.</td>
<td>Prize payout for jackpot.</td>
</tr>
</tbody>
</table>
**System Security and Access**

(7863.0260, s. 1a D; 7863.0270, s. 21, 28)

| 1. | The electronic linked bingo game system must be located in Minnesota and in a secure location with limited, authorized access. |
| 2. | Any system elements that hold game data, other than the electronic linked bingo devices, must be in a locked area or in a locked case or compartment with access limited to designated personnel. |
| 3. | The linked bingo game provider must register employees having authorized system access with the Board. |
| 4. | The system must be in a secure location and provide electronic security for the games against alteration, tampering, or unauthorized access. |
| 5. | 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. |
| 6. | All systems must require VPN or SSL encrypted tunneling protocols unless otherwise approved by the Board. |

**Data Alteration**

(7863.0260, s. 1a E, I; 7863.0270, s. 22)

| 1. | The electronic linked bingo system must not permit the alteration of any accounting or significant event log information that was communicated from the electronic linked bingo device without Board-approved access controls. |
| 2. | In the event financial data is changed, the electronic linked bingo system must be able to produce an automated audit log documenting the following: |
| a. | The data element altered. |
| b. | The data element value prior to alteration. |
| c. | The data element value after alteration. |
| d. | The time and date of alteration. |
| e. | User log-in of personnel that performed alteration. |

**Backup and Recovery**

(7863.0260, s. 1a B; 7863.0270, s. 23)

| 1. | An electronic linked bingo system must have a separate physical medium for securely storing required data on the computer, which must be backed up in real time by a backup medium. |
| 2. | 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. |
| 3. | All data required to be available or reported by this provision must be retained for a period of not less than 3-1/2 years. |
| 4. | All storage of critical data must use error checking and be stored on a nonvolatile physical medium. |
| 5. | 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. |
| 6. | In the event of a catastrophic failure when the electronic linked bingo game system cannot be restarted in any other way, it must be possible to reload the electronic linked bingo system from the last viable backup point and fully recover the contents of that backup, to consist of at least the following information: |
| a. | All date and time indicators associated with data failure and electronic linked bingo system reload. |
| b. | All accounting information. |
| c. | Auditing information, including all open game schedules and the summary of completed games. |
| d. | Employee files with access levels. |

**System Access; Password Requirements**

(7863.0260, s. 1a D, I; 7863.0270, s. 24)

| 1. | The linked bingo game provider must maintain password access for the linked bingo game provider; the distributor must maintain password access for the distributor; and the organization must maintain password access for the gambling manager and sellers. |
| 2. | The linked bingo game provider, the distributor, and the organization must register employees with authorized system access with the Board. |
| 3. | The operating system software and application software must have multiple security access levels to control and restrict different classes of access. The accounts for the access levels must be unique when assigned to the authorized personnel and only one user per account is allowed. |
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 linked bingo game provider and the gambling manager;
   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; and
   e. the system must automatically log out after a period of inactivity in excess of five minutes.

System Log-In and Log-Out Requirements
(7863.0270, s. 25)
Applies to linked bingo game providers, distributors, gambling managers, assistant gambling managers, and sellers.

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<tbody>
<tr>
<td>1.</td>
<td>The operating system and any local and central servers must have a password log-in with two level codes comprised of a personal identification code and a personal password.</td>
</tr>
<tr>
<td>2.</td>
<td>The system must include log-in and log-out procedures for system and point-of-sale devices.</td>
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</table>

Electronic Accounting and Reporting; Record of Daily System Transactions
(7863.0260, s. 1a A; 7863.0270, s. 26)

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<table>
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<tbody>
<tr>
<td>1.</td>
<td>One or more electronic accounting systems must perform reporting and other functions in support of the electronic linked bingo system. The electronic accounting system must not interfere with the outcome of any gaming function.</td>
</tr>
<tr>
<td>2.</td>
<td>A permanent record of daily transactions played on the electronic linked bingo game system must be maintained by the electronic linked bingo game system on a database other than on the local server. The database and central server must be accessible to the Gambling Control Board at all times.</td>
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</table>

Reporting Requirements of Electronic Accounting System
(7863.0260, s. 1a; 7863.0270, s. 27)

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<tbody>
<tr>
<td>1.</td>
<td>An electronic linked bingo game report must be available to the Board on demand, printed or otherwise, for each game currently in play containing the following information:</td>
</tr>
</tbody>
</table>
   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 linked bingo faces in play in the game. |
   d. The jackpot prize of the entire game. |
   e. The purchase price per electronic linked bingo face assigned to the game. |
   f. The time and date that the game became available for play. |
   g. Locations where the game is being played. |
| 2. | An electronic linked bingo game report must be available to the Board on demand, printed or otherwise, 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 electronic linked bingo faces played and sold. |
   d. The time and date that the game became available for play. |
   e. The time and date that the game was completed or removed from play. |
   f. The ball draw. |
   g. Locations where the game was played. |
   h. The detailed accounting for each site, including total faces played, and prizes awarded. |
   i. The final payout percentage of the game when removed from play. |
   j. The purchase price per electronic linked bingo face assigned to the game. |
| 3. | Other electronic linked bingo game reports that must be available to the Board on demand, printed or otherwise, are: |
   a. Active site reports: |
      (1) Site name, address, and telephone number. |
      (2) Licensed organization name and license number. |
(3) Premises permit number and number of devices at site.

(4) Must be able to distinguish sites that are not active.

b. Revenue reports:

(1) Daily activity by site, by organization, and for all sites.

(2) Site name and license number.

(3) Premises permit number.

(4) Number of devices in use at the site.

(5) Bingo faces 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.

c. Month-end reports for each site totaling all daily sales activity, detail of all games closed during the month, and status of games remaining in play.

d. Inventory reports:

(1) Current site inventory showing beginning of the day inventory, additions, faces sold, and ending inventory.

(2) Month-end reports for each site showing faces received, put into play, and removed from play.

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

f. Real-time site activity report with the ability to:

(1) View live activity at site.

(2) View each active device noting the device number, current credits, and game being played.

(3) View each transaction with date and time stamp, including seller log-in and log-off, device load, game play, device redeemed, and any malfunction.

g. System user list:

(1) Full name of sellers, assistant gambling managers, and gambling managers.

(2) Position (seller, assistant gambling manager, gambling manager, distributor, linked bingo game provider, or Gambling Control Board investigator).

(3) Site name, organization name, or other description.

(4) User ID of all persons with system access.

(5) Access level.

(6) Contact telephone number and email.

h. A seller’s system access must be limited to the following information within the end of shift reports and end of day reports:

(1) Cash in.

(2) Cash out.

(3) Unredeemed credits.

(4) Gross receipts.

(5) Prizes paid.

(6) Net receipts.

4. Other statistical and activity reports as required by the Board and maintained by the linked bingo game provider must be provided in a format prescribed by the Board upon request.
Electronic Game System  
(7863.0270, s. 9, 28)

1. Each component of an electronic game system must function as indicated by the communication protocol implemented by the licensed linked bingo game provider of the electronic linked bingo game system.

2. All communication between a server and the electronic linked bingo devices must use authentication and encryption protection 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.

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  
(7863.0270, s. 29)

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 linked bingo 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  
(7863.0270, s. 30)

1. All communications must pass through at least one application-level firewall recognized by the certified testing laboratory. Alternative network paths are allowed if equally protected by a firewall. 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  
(7863.0270, s. 31, 32)

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

2. 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.
      (6) Accurate time and date on all components of each system at each site.

Test System and Equipment  
(7863.0270, s. 33)

Linked bingo game providers must provide a test system and equipment to the Board to test pending and approved games.
### Test Software

(7863.0270, s. 34)

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<td>1.</td>
<td>Linked bingo game providers 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.</td>
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<td>2.</td>
<td>Linked bingo game providers must allow regulatory test software to be added to an electronic game system to verify approved product.</td>
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### Activation of Daubing

(7863.0270, s. 35)

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<td>The system must acknowledge that a player has activated the daubing process.</td>
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### Other Features/Findings:

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**Minnesota Gambling Control Board**  
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