

7863.0270 ELECTRONIC LINKED BINGO GAME SYSTEM STANDARDS AND REQUIREMENTS.

Subpart 1. **Scope.** In addition to the provisions of parts 7861.0270 and 7863.0260, subparts 1 and 1a, and Minnesota Statutes, sections 349.12, subdivisions 12a, 25a, and 25c; 349.17, subdivisions 6, 8, and 9; and 349.211, subdivision 1a, an electronic linked bingo game system must meet the requirements contained in this part.

Subp. 2. **Activating play.** Coded entry to activate play may include manual entry or the use of a magnetic strip card or bar-coded receipt provided at the point of sale.

Subp. 3. **Initial screen.** An initial screen must appear displaying a main menu containing:

- A. the linked bingo game provider's logo;
- B. the compulsive gambling hotline telephone number; and
- C. electronic linked bingo games available for play.

Subp. 4. **Electronic monitoring by board.** Electronic monitoring of the operation of the electronic linked bingo device by the board will be limited to read-only access of transaction logs and status of devices. The board is not allowed to alter any data or game play.

Subp. 5. **Secured data transmission.** An electronic linked bingo game system must provide secured data transmission to all participating locations.

Subp. 6. **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.

Subp. 7. **Changes in version of system or game.**

A. 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.

B. Any changes to the electronic linked bingo game or system must be approved by the director before the game or system is placed into operation.

C. 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.

Subp. 8. **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 the requirements of this subpart.

A. For purposes of this subpart, 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.

B. A licensed linked bingo game provider may jointly develop application software for an electronic linked bingo system and 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.

C. 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.

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

Subp. 9. **Secure communication.** Connections between all components of the electronic linked bingo game system must only be through the use of secure communication protocols which are designed to prevent unauthorized access or tampering, employing Advanced Encryption Standard (AES) specifications as defined by the National Institute of Standards and Technology (NIST).

Subp. 10. **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.

Subp. 11. **Electronic accounting data.** Electronic accounting data must be at least ten digits in length and must be maintained in dollars and cents.

Subp. 12. **Cash and inventory verification.** The system must record the value of bingo faces purchased and played, and prizes won.

Subp. 13. **Restricted use.**

A. 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.

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

Subp. 14. **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:

A. 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;

B. program error check and verification and authentication of any mismatch;

C. 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;

D. electronic accounting data capturing the record of transactions for electronic linked bingo devices in use for each local and central server including:

(1) bingo faces purchased and prizes won;

(2) electronic devices in play for each site;

(3) software state (the last normal state or last status before interruption);

and

(4) a log of all current-day transactions prior to interruption;

E. 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 board and must include the name of the authorized person who performs any recapture or memory clear of the local or central server; and

F. 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.

Subp. 15. **Randomization.** 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. As used in this subpart, unless the context requires a different meaning, "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. 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.

Subp. 16. **Game information on system.** 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:

- A. a unique serial number identifying each game or session ID and each bingo face ID;
- B. a description of the game sufficient to categorize the game or session relative to other games or sessions;
- C. 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; and
- D. the purchase price per electronic linked bingo face assigned to the game or session.

Subp. 17. **Game information on device.** The following data must be maintained and be viewable electronically on the electronic linked bingo device:

- A. the pattern;
- B. the cost;
- C. confirmation that a game is active;
- D. the estimated prize amount;
- E. the number on the ball selected;
- F. the number of balls called; and
- G. the site of the winner.

Subp. 18. **Electronic linked bingo face generation.** Upon purchase initiation request from an electronic linked bingo device, the electronic linked bingo system must dispense an electronic facsimile of a bingo face. Once dispensed, such face or outcome must not be reused until the bingo permutation is exhausted.

Subp. 19. **Game status and auditing.**

- A. Only upon the game termination shall the details of that game be revealed to the person performing the game audit or status check.

B. 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.

Subp. 20. **Game definition.** All games and sessions must contain the following information:

- A. game ID;
- B. game pattern type;
- C. game version;
- D. linked bingo game provider;
- E. game name;
- F. purchase price per electronic linked bingo face; and
- G. prize payout for jackpot.

Subp. 21. **System security and access.**

A. The electronic linked bingo game system must be located in Minnesota in a secure location with limited, authorized access.

B. 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.

C. The linked bingo game provider must register employees having authorized system access with the board.

D. The system must be in a secure location and provide electronic security for the games against alteration, tampering, or unauthorized access.

E. 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.

Subp. 22. **Data alteration.** 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. In the event financial data is changed, the electronic linked bingo system must be able to produce an automated audit log documenting the:

- A. data element altered;
- B. data element value prior to alteration;
- C. data element value after alteration;

- D. time and date of alteration; and
- E. user log-in of personnel that performed alteration.

Subp. 23. Backup and recovery.

A. 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.

B. All data required to be available or reported by this subpart must be retained for a period of not less than 3-1/2 years.

C. All storage of critical data must use error checking and be stored on a nonvolatile physical medium.

D. 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.

E. In the event of a catastrophic failure when the electronic linked bingo 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:

- (1) all date and time indicators associated with data failure and linked bingo system reload;
- (2) all accounting information;
- (3) auditing information, including all open game schedules and the summary of completed games; and
- (4) employee files with access levels.

Subp. 24. System access; password requirements.

A. 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.

B. The linked bingo game provider, the distributor, and the organization must register employees with authorized system access with the board.

C. 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.

D. 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:

(1) 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;

(2) the storage of passwords must be in an encrypted, nonreversible form;

(3) a program must be available that will list all registered users on the system including their privilege level;

(4) the password must have a length of at least six alphanumeric characters; and

(5) the system must automatically log out after a period of inactivity in excess of five minutes.

Subp. 25. **System log-in and log-out requirements.** System log-in and log-out requirements apply to linked bingo game providers, distributors, gambling managers, assistant gambling managers, and sellers.

A. 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.

B. The system must include log-in and log-out procedures for system and point-of-sale devices.

Subp. 26. **Electronic accounting and reporting; record of daily system transactions.**

A. 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.

B. 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 board at all times.

Subp. 27. **Reporting requirements of electronic accounting system.** The electronic linked bingo game system must provide the following reports to the Gambling Control Board and the Department of Revenue.

A. An electronic linked bingo game report must be available to the board on demand for each game currently in play and prior to winner verification. The report must contain the following information:

- (1) a unique serial 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 linked bingo faces in play in the game;
- (4) the jackpot prize of the entire game;
- (5) the purchase price per electronic linked bingo face assigned to the game;
- (6) the time and date that the game became available for play; and
- (7) locations where the game is being played.

B. An electronic linked bingo game report must be available to the board on demand for each completed game. The report must contain the following information:

- (1) a unique serial 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 linked bingo faces played and sold;
- (4) the time and date that the game became available for play;
- (5) the time and date that the game was completed or removed from play;
- (6) the ball draw;
- (7) locations where the game was played;
- (8) the detailed accounting for each site, including total faces played, and prizes awarded;
- (9) the final payout percentage of the game when removed from play; and
- (10) the purchase price per electronic linked bingo face assigned to the game.

C. Other electronic linked bingo game reports that must be available to the board on demand are:

- (1) Active site reports:
 - (a) site name, address, and telephone number;

- (b) licensed organization name and license number;
 - (c) premises permit number and number of devices at site; and
 - (d) must be able to distinguish sites that are not active.
- (2) Revenue reports:
- (a) daily activity by site, by organization, and for all sites;
 - (b) site name and license number;
 - (c) premises permit number;
 - (d) number of devices in use at the site;
 - (e) bingo faces sold and the gross receipts;
 - (f) prizes awarded;
 - (g) net receipts;
 - (h) payout percentage;
 - (i) actual cash sales (dollar amount);
 - (j) actual cash redeemed (dollar amount); and
 - (k) unredeemed cash credits.
- (3) 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.
- (4) Inventory reports:
- (a) current site inventory showing beginning of the day inventory, additions, faces sold, and ending inventory; and
 - (b) month-end reports for each site showing faces received, put into play, and removed from play.
- (5) Faces purchased, sold, and maintained by distributor.
- (6) Real-time site activity report with the ability to:
- (a) view live activity at site;
 - (b) view each active device noting the device number, current credits, and game being played; and
 - (c) view each transaction with date and time stamp, including seller log-in and log-off, device load, game play, device redeemed, and any malfunction.

(7) System user list:

- (a) full name of sellers, assistant gambling managers, and gambling managers;
- (b) position (seller, assistant gambling manager, gambling manager, distributor, linked bingo game provider, or Gambling Control Board investigator);
- (c) site name, organization name, or other description;
- (d) seller, assistant gambling manager, gambling manager, board investigator, and distributor user ID;
- (e) access level; and
- (f) contact telephone number and e-mail.

(8) A seller's system access must be limited to the following information within the end of shift reports and end of day reports:

- (a) cash in;
- (b) cash out;
- (c) unredeemed credits;
- (d) gross receipts;
- (e) prizes paid; and
- (f) net receipts.

D. 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.

Subp. 28. Electronic game system.

A. 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.

B. All communication between a server and the electronic linked bingo devices must use authentication and encryption protection employing Advanced Encryption Standard (AES) specifications as defined by the National Institute of Standards and Technology (NIST) to provide secure authentication of the device and the server, ensure the integrity of the data communicated, and for confidentiality.

C. 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.

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

Subp. 29. Electronic game system security.

A. 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 nonbroadcasting encrypted system.

B. 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.

C. The electronic game system must be secure from all other site communication systems and users at a gambling site.

Subp. 30. Firewall protection. 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.

Subp. 31. Remote access. 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; and
- 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) the time and date must be accurate on all components of each system at each site.

Subp. 32. **Data access by board.** 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.

Subp. 33. **Test system and equipment.** Linked bingo game providers must provide a test system and equipment to the Gambling Control Board, at the linked bingo game provider's expense, to test pending and approved games.

Subp. 34. **Test software.**

A. 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.

B. Linked bingo game providers must allow regulatory test software to be added to an electronic game system to verify approved product.

Subp. 35. **Activation of daubing.** The system must acknowledge that a player has activated the daubing process.

Subp. 36. **Prior board approval required for electronic gambling equipment; conformance with standards for previously approved electronic gambling equipment; independent laboratory testing required for certain electronic gambling equipment.** This subpart applies to board approval of electronic gambling equipment, conformance with standards for previously approved electronic gambling equipment, and independent laboratory testing required for certain electronic gambling equipment.

A. Before the sale, lease, or distribution of any electronic gambling equipment in Minnesota, a linked bingo game provider must obtain prior board approval for the electronic gambling equipment. The linked bingo game provider must provide to the director at no charge the following:

- (1) the list of proposed equipment in an electronic format or other format approved by the board;
- (2) the electronic linked bingo games; and
- (3) the electronic linked bingo test system and equipment to be used to determine compliance with this part.

B. Electronic gambling equipment must be received by the board on or before the 15th day of the month to ensure consideration at the board's meeting the following month.

C. The board must notify the linked bingo game provider in writing no later than five days after a board meeting of the board's decision on whether the product is approved for sale in Minnesota.

D. For changes to the payout structure for any approved game, the linked bingo game provider must assign a new game identification and submit the game to the board for approval before being offered for sale in Minnesota.

E. For changes to approved electronic gambling equipment, the linked bingo game provider must submit the changes to the director for review and, if required by the director, equipment must be submitted for review and approval by the board. Electronic gambling equipment approved prior to the effective date of this subpart must become compliant within 180 days of the effective date of this part.

F. Within 14 days of receipt of an electronic linked bingo game, the director must notify the linked bingo game provider in writing of the director's decision to recommend approval or recommend denial.

(1) The written notice of the director's recommended denial must state the basis for the director's recommendation of denial. Within 14 days of receipt of a notice of the director's recommended denial, the linked bingo game provider may request a contested case hearing under Minnesota Statutes, chapter 14.

(2) The written notice of the board's denial must state the basis for the board's denial.

G. Linked bingo game providers are in compliance if the electronic gambling equipment is approved by the board and is produced in compliance with the standards prescribed in this part. Once approved, a linked bingo game provider may not change the equipment without prior approval of the board, in compliance with this subpart and part 7863.0260, subpart 1a.

The board shall withdraw its approval if it determines that the electronic gambling equipment was not manufactured in compliance with standards in this part. If the board decides that its approval should be withdrawn, the board will notify the linked bingo game provider of its right to request a contested case hearing under Minnesota Statutes, chapter 14.

H. Independent testing requirements for electronic gambling equipment when required by the board shall include a certification from a 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;
- (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.

I. Independent testing of electronic gambling equipment includes:

- (1) electronic linked bingo game devices;
- (2) programmable electronic devices;
- (3) electronic linked bingo game systems;
- (4) upgrades or changes to previously approved and tested equipment;
- (5) other technical hardware devices used in conjunction with lawful gambling equipment; and
- (6) software applications and version upgrades used in conjunction with lawful gambling equipment.

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