Gambling Administration Guidelines

Casino Act 1997—Ticket-in Ticket-out Systems

Effective 3 December 2020

> **The following TITO (ticket-in ticket-out) system guidelines have been published by the Liquor and Gambling Commissioner under section 17 of the *Gambling Administration Act 2019* for the purposes of regulation 9 of the Casino Regulations 2013.**

1. Introduction

The holder of the casino licence may provide a gaming machine or automated table game equipment on the licensed casino premises that may be operated by the insertion of a banknote or by ticket (known as "ticket-in ticket-out" or TITO) subject to various transactional limits.

To facilitate the approval and installation of equipment which will be required to allow gaming machines to be operated by the insertion of banknotes or TITO, the Gaming Machines Regulations 2020 have been amended to include a bank note acceptor and any device that allows the printing or issue of tickets for use in connection with a gaming machine, as prescribed components.

Furthermore, a gaming machine or automated table game equipment that is intended to be operated in connection with a TITO system must comply with the requirements of, and be operated in accordance with Gambling Administration Guidelines issued by the Liquor and Gambling Commissioner under section 17 of the *Gambling Administration Act 2019*.

2. Commencement

These guidelines come into effect from 3 December 2020, being the date determined by the Commissioner by notice published in the South Australian Government Gazette.

The Commissioner may by notice in the Gazette vary or revoke these guidelines at any time in accordance with section 17(3) of the *Gambling Administration Act 2019*.

Version control will be used to indicate revisions to these guidelines.

3. Intended Audience

These guidelines are intended for use by suppliers of TITO proprietary equipment, cash redemption terminals, gaming machine manufacturers, Accredited Testing Facilities (ATF) and Regulators to support the implementation of TITO at the licensed casino.

Government of South Australia
Attorney-General's Department

4. Interpretation

(1)   In these guidelines, unless the contrary appears—

(a)   *TITO enabled device* means a device such as a gaming machine, automated table game, cash redemption terminal or cashier terminal which is configured to issue tickets or accept tickets for redemption, or both;

(b)   *TITO host* means the core back end servers and database of the TITO system;

(c)   *TITO peripheral* means hardware by which a TITO enabled device conducts a TITO transaction;

(d)   *TITO system* means the entire TITO system including TITO enabled devices and the TITO host.

5. Purpose and Scope

(1)   These guidelines specify the functional and technical requirements for the operation of "Ticket-In Ticket-Out" (TITO) on gaming machines, automated table game equipment and Cash Redemption Terminals (CRT) operating at the licensed casino.

(2)   These guidelines, together with relevant legislation and regulations ensure that TITO operation in the licensed casino is secure, fair, auditable, and complies with legislated harm minimisation measures.

(3)   Any matters arising from the evaluation and operation of TITO systems and related devices not covered by these guidelines will be resolved at the discretion of the Commissioner.

(4)   These guidelines do not apply to:

(a)   the implementation of facial recognition technology, a legislated harm minimisation measure;

(b)   automated risk monitoring systems approved for operation at the licensed casino;

(c)   account based cashless gaming systems approved for operation at the licensed casino; and

(d)   TITO, CRT and any other forms of cashless gaming operations in South Australian Hotels and Clubs (which is in place under other regulatory arrangements).

6. Dependencies

(1)   The TITO system to be operated at the licensed casino is to be facilitated through the electronic monitoring system required to be approved by the Liquor and Gambling Commissioner for the purposes of section 38 of the *Casino Act 1997*.

(2)   The implementation of TITO at the licensed casino is based on the adoption of approved protocols which support TITO and bank note acceptor operation.

(3)   TITO peripherals to support the implementation of TITO (including banknote acceptors and ticket printers) must not be installed or operated in a gaming machine or automated table game equipment unless the components:

    (a)   comply with the applicable technical requirements defined under the *Australian/New Zealand Gaming Machine National Standard 2016* (or any subsequent version) and other applicable technical requirements;

    (b)   comply with any technical requirements for TITO as listed in the South Australian Appendix to *the Australian/New Zealand Gaming Machine National Standard 2016* (or any subsequent version);

    (c)   comply with the applicable technical requirements of the communication protocol being operated at the licensed casino for gaming machines and automated table game equipment;

    (d)   have been tested for regulatory compliance by an Accredited Testing Facility (ATF); and

    (e)   have been approved by Consumer and Business Services (CBS) as part of the gaming machine or automated table game equipment in which they are to be installed.

(4)   When enabled, TITO systems must implement the transactional limits that are prescribed under the Casino Regulations 2013. Refer to section 14 of these guidelines—South Australia specific TITO and BNA limits.

(5)   When enabled, banknote acceptors must implement the transactional limits that are prescribed under the Casino Act 1997. Refer to section 14 of these guidelines—South Australia specific TITO and BNA limits.

(6)   Cash Redemption Terminals (CRTs) must not be operated or installed at the licensed casino unless its components:

    (a)   comply with the applicable technical requirements defined under the Australian/New Zealand Gaming Machine National Standard 2016 (or any subsequent version);

    (b)   comply with the applicable technical requirements of the communication protocol being operated at the licensed casino for gaming machines and automated table game equipment;

    (c)   have been tested for regulatory compliance by an Accredited Testing Facility (ATF); and

    (d)   approved by Consumer and Business Services (CBS).

(7)   For the purposes of 6(6)(a), a CRT must at a minimum comply with the applicable requirements of the following sections of the Australian/New Zealand Gaming Machine National Standard 2016 (or any subsequent version):

    (a)   Cabinet Hardware and Security;

    (b)   Software Verification;

    (c)   Retention of non-volatile memory; and

    (d)   EMC and Electrical Safety requirements.

7. General Requirements

(1)   TITO when implemented at the licensed casino can be configured as a Ticket-Out (TO) only system, or both a Ticket-In and Ticket-Out (TITO) system. TITO replaces the use of cash for the exchange of credits to and from gaming machines and automated table game equipment using cashable tickets whereby ticket-in may be facilitated by either a dedicated ticket-in device or a banknote acceptor that can read tickets.

(2)   TITO peripherals must be integrated into and be controlled by a TITO enabled device which is able to—

    (a)   enable or disable the activity of the TITO peripheral at appropriate times (e.g.. when credits are being accepted or paid out by the TITO enabled device); and

    (b)   manage and diagnose faults and the status of any faults in the TITO peripheral.

(3)   The installation of a TITO peripheral in a TITO enabled device must not void the regulatory compliance of the TITO enabled device into which it is installed.

(4)   It must be possible to enable or disable TITO functionality on a TITO enabled device.

(5)   TITO systems must use an approved communication protocol to communicate with TITO enabled devices which must—

    (a)   implement a means of error checking; and

    (b)   implement a 2 way handshaking process between the initiating TITO enabled device and the TITO host for the redemption of tickets; and

    (c)   be robust and able to handle incomplete, misrouted, duplicated, altered in transit or unauthorised TITO transactions.

(6)   TITO peripherals such as ticket printers and ticket acceptors must be installed safely and securely to prevent injuries to patrons or attendants using the TITO enabled device.

(7)   TITO enabled devices must automatically abort a ticket in or a ticket out transaction if connection to the TITO host is detected as lost.

(8)   TITO operation across a TITO system must be transaction based.

(9)   TITO systems must use a database or similar managed information system for the storage of TITO data.

(10)   Each TITO transaction on the TITO system must—

    (a)   be allocated a unique sequence number; and

    (b)   have a time-date stamp.

(11)   TITO enabled devices and the TITO system must be configured to ensure synchronicity of time-date data used to time-date stamp TITO transactions.

(12)   TITO enabled devices should not allow TITO operation until they have time-date synchronised with the TITO system.

(13) TITO systems may have—

    (a) a configurable **maximum ticket out limit** restricting the cash value of tickets that TITO enabled devices can issue;

    (b) a configurable **maximum ticket in limit** where tickets having a cash value in excess of the maximum ticket in limit are rejected;

    (c) a configurable **minimum ticket out limit** which define the minimum cash value that tickets can be issued by particular TITO enabled devices;

    (d) a configurable **maximum credit limit** restricting a TITO enabled device from redeeming a ticket if it would cause the credit meter to exceed this value.

(14) Tickets that have a cash value in excess of the prescribed maximum ticket in limit may be redeemed at a cashier terminal or cash redemption terminal.

(15) TITO systems—

    (a) must have a configurable **ticket expiry time** which defines the period of time from the time of ticket issue to the time that tickets may be redeemed by the TITO system; and

    (b) may have an additional configurable **ticket floor expiry time** which defines the period of time from the time of ticket issue to the time that tickets may be redeemed by a gaming machine or an automated table game.

(16) TITO enabled devices which issue or accept tickets on the TITO system must provide accurate and accountable logging for tickets printed, accepted and rejected.

(17) Tickets may only be used for cash transactions and must not contain any form of promotional information or advertising such as 'non-cashable' credits.

(18) Unredeemed tickets must be accounted for and processed by the casino licensee in accordance with the Approved Licensing Agreement between the Minister and the casino licensee.

(19) User Manuals and Operation Manuals must be clear and concise, explaining the details, relevant information and procedures regarding the TITO system for use by system users and venue staff.

8. TITO Host Requirements

(1) The TITO host must be of a robust design, able to withstand failures without loss of data.

(2) There must be some form of redundancy to allow gaming to continue in the event of a TITO host failure.

(3) The TITO host database that holds the TITO data of the TITO system must be secure, fault tolerant and have redundant data storage.

(4) The TITO host must have built in redundancy for critical components.

(5) The TITO host must be able to recover back to an operational state without loss of TITO data following an interruption or outage.

(6)   The TITO host must provide accountable, transparent and auditable recording and reporting of transactions to enable the accurate calculation and reporting of gaming revenue, player payments, taxation and any other TITO related financial information required for a venue to comply with its regulatory obligations.

(7)   The TITO host must provide reporting and record keeping for liability for unclaimed and expired tickets.

(8)   The TITO host must have the ability to record and report on all TITO transactions and TITO activity on the system, including, but not limited to issued tickets, redeemed tickets and expired tickets.

(9)   The TITO host must have the required capacity to be able to store all TITO data for period of time necessary in accordance with relevant legislation.

(10)   The TITO host must provide secure access to and storage of TITO data to prevent any unauthorised manipulation of TITO data.

(11)   The TITO host must be able to correctly handle the situation when duplicate ticket unique ticket identifiers are created by 2 different TITO enabled devices.

(12)   Where applicable, caching of unique ticket identifier across components of the TITO system components must be robust and designed to propagate to the TITO host without risks of errors, intercept, or tampering.

(13)   The TITO host must be under version control and under regulatory approval control in line with the *Casino Act 1997*.

(14)   TITO host software must be able to be audited by allowing software signatures to be calculated for controlled files.

9. Ticket Details

(1)   Tickets must comply with the following requirements—

    (a)   the following information must be printed on tickets:

        (i)   a heading that uniquely identifies the ticket for TITO purposes (e.g. the words "CASH OUT TICKET");

        (ii)   venue information regarding where the ticket was printed (e.g. venue and venue name details);

        (iii)   information identifying the location of the TITO enabled device which issued the ticket (e.g. house or bank number);

        (iv)   a sixteen or eighteen digit number (a **unique ticket identifier**) in—

            A. a readable format in at least 2 places on the ticket; and

            B. in a machine readable format such as a barcode;

        (v)   the date and time that the ticket is printed;

        (vi)   the value of the ticket expressed in dollars and cents;

(vii)   the following gambling helpline information text:

" *Gambling too much?*
For free and confidential advice 24/7 call the Gambling Helpline on
1800 858 858 or visit gamblinghelponline.org.au"

(b)   tickets must include an expanded responsible expanded responsible gambling warning message in accordance with the Schedule prescribed in the relevant code of practice, either printed by the issuing TITO enabled device or pre-printed on the ticket (it is acceptable for expanded responsible gambling messages to be printed on the front or rear face of the ticket).

(c)   tickets must be designed to be durable for their expected life span and provide clear legibility of text when the ticket is printed.

(d)   if the ticket is vulnerable to environmental conditions, the ticket should include applicable storage and handling instructions on either the rear or the face of the ticket (e.g. do not store in direct sunlight).

(e)   tickets must not contain any form of promotional or advertising information.

(2)   Notwithstanding the requirements set out in 9(1)(b), it is acceptable for any stocks of tickets which were pre-printed to comply with the TITO technical requirements prescribed in Schedule 4 of the Casino Regulations 2013 immediately before the commencement of these guidelines, to be exhausted.

10. Ticket-In Process

(1)   The functionality of ticket-in is equivalent to a player inserting cash into a gaming machine or automated table game equipment. Ticket-in may be facilitated by either a dedicated ticket-in device or a banknote acceptor that can read tickets.

(2)   Credits must only be registered for valid tickets.

(3)   Tickets may only be accepted when the TITO enabled device is in an active state and able to receive and credit tickets.

(4)   If the TITO enabled device is active then a ticket may be inserted at any time into the device in accordance with the applicable requirements for insertion in the Australia/New Zealand Gaming Machine National Standards.

(5)   TITO enabled devices must automatically reject inserted tickets when it can detect that the connection to the TITO host is down.

(6)   The TITO system must verify the unique ticket identifier printed on the ticket, and if valid, request and wait for authorisation from the TITO host for the ticket.

(7)   A TITO enabled device must only redeem valid tickets that have been authenticated by the TITO host.

(8)   If a TITO enabled device is not able to receive and process tickets, the inserted ticket must be rejected and returned back to the player.

(9)   If an inserted ticket is detected as invalid by a TITO enabled device then the ticket must be rejected and returned back to the player.

(10) A TITO enabled device must not accept another ticket until the current ticket-in transaction has been completed (i.e. either approved or rejected).

(11) A TITO enabled device must be able to notify the TITO system if an error occurs during the ticket in validation process (e.g. a timeout, ticket jam, or other fault).

(12) Where possible, TITO enabled devices must have ability to hold a ticket in escrow if the TITO host requests additional time to authenticate the ticket. TITO enabled devices that are not able to hold a ticket in escrow may eject the inserted ticket back to the player if requested to hold the ticket in escrow.

(13) If the ticket is approved by the TITO host, the TITO enabled device must retain the ticket and add the cash amount of the inserted ticket to the credit meter (or equivalent) of the TITO enabled device, and notify the TITO system of the applicable ticket in meter and status updates.

(14) TITO enabled devices must provide visual or audio feedback to players that the ticket has been accepted and redeemed.

(15) A ticket-in transaction is considered complete when the TITO host has authorised the ticket-in request from the TITO enabled device, TITO meters are successfully transmitted to the TITO host, and ticket stacking by the TITO enabled device is complete.

(16) The TITO enabled device must have a method to display a clear and legible message with the reason for a rejected ticket for a reasonable period of time.

(17) The TITO system must support the provision of at least the following reasons for rejection:

  (a) ticket system unavailable;

  (b) ticket expired or too old;

  (c) ticket amount too large;

  (d) ticket invalid;

  (e) ticket not found;

  (f) ticket already redeemed;

  (g) other reason—see operator.

(18) If the TITO enabled device is not able to read the unique ticket identifier on the ticket prior to being interrupted, the TITO enabled device must reject the ticket and return back to the patron.

(19) The TITO system must ensure that tickets can only be redeemed once.

(20) TITO enabled devices that can accept and redeem tickets must maintain a log of the last 35 accepted or rejected tickets that must include at least the following details for each record:

  (a) time and date;

  (b) amount;

  (c) unique ticket identifier;

  (d) whether the ticket was accepted or rejected.

11. Ticket-Out Process

(1)   The functionality of ticket out is equivalent to a player pressing collect and collecting credits from a gaming machine or automated table game equipment. The TITO enabled device will exchange with the system a unique ticket identifier and ticket information which the TITO system will retain and use in the future for ticket redemption.

(2)   Tickets issued by TITO enabled devices must have a unique ticket identifier which is used by the TITO system to uniquely identify tickets.

(3)   The TITO host must be able to cater for the scenario when multiple TITO enabled devices create identical unique ticket identifiers.

(4)   A ticket can be redeemed for cash or inserted into a TITO enabled device with ticket acceptance, in order to transfer the cash value of the ticket to the credit meter (or equivalent) of the TITO enabled device.

(5)   A ticket is printed by the TITO enabled device when a player presses collect or similar on the TITO enabled device subject to any TITO limits for printed tickets.

(6)   A TITO enabled device must not print a ticket with a cash value that exceeds the configured maximum ticket out limit, if such a limit is supported.

(7)   A TITO enabled device must wait for attendant authorisation before printing a ticket with a cash value that exceeds the configured ticket out authorisation limit, if this limit is supported.

(8)   TITO enabled devices must provide feedback or messages to players while a ticket is being printed and issued (e.g. "Printing ticket...please wait" during printing and "Please collect your ticket" when printing is complete).

(9)   A ticket out transaction is considered complete when the ticket has been printed and ticket meters and ticket information are successfully transmitted to the TITO system.

(10) A ticket must only be printed out when the TITO enabled device is actively connected to the TITO system.

(11) TITO enabled devices must be able to notify the TITO system of faults if they occur and interrupt the ticket out process.

(12) TITO enabled devices must be able to resume and recover upon any interruption during the ticket out process.

(13) The TITO system must be able to cater for the potential of orphaned tickets after any interruption, where the ticket has been printed with a unique ticket identifier but does not exist in the TITO database.

(14) TITO enabled devices that are able to issue tickets must maintain a log of the last 35 issued tickets that must include at least the following details for each record:

   (a)   time and date;

   (b)   amount;

   (c)   unique ticket identifier.

(15) The TITO system must be able to cater for the scenario of partially printed tickets where a fault has occurred during printing but the complete unique identifier is not clearly visible on the ticket.

12. Cash Redemption Terminals

(1)   A CRT is intended to assist with the processing of gaming machine and automated table game transactions by redeeming or issuing tickets. It is not intended to be a complete replacement for cashiers but offers a self-service option for customers.

(2)   Cash redemption terminals may accept banknotes for the purpose of issuing tickets but must not provide any additional functionality relating to banking transactions (including ATM or EFTPOS functionality).

(3)   Cash redemption terminals may provide banknote breaking functionality.

(4)   Cash redemption terminals must communicate in a secure and approved manner with the TITO system using an approved protocol.

(5)   Cash redemption terminals must have system-based security provisions that detect tampering or misuse and must have sufficient security relative to the amount of cash stored in the terminal. Such controls are expected to complement physical supervision.

(6)   Cash redemption terminals must display clear and meaningful messages when a fault or error condition occurs.

(7)   Cash redemption terminals must have the facility to display device software and firmware version for the purpose of software verification.

(8)   Cash redemption terminals must facilitate or allow software signatures to be generated for critical software for the purpose of software verification.

(9)   Cash redemption terminals must provide instructions in plain English and may be programmed to toggle to an alternate official language but must default to English after 60 seconds of inactivity. Testing of such CRTs must include certification that the alternative language is a true translation of the English message.

(10)   The display of advertising on a cash redemption terminal, other than the display of manufacturer logos, venue name and prescribed responsible gambling messaging in accordance with the South Australian Gambling Code of Practice is prohibited.

(11)   Cash redemption terminals may have configurable limits for ticket-in and ticket-out relevant to TITO enabled devices as defined in these guidelines.

(12)   In situations where a cash redemption terminal has insufficient funds to completely pay out a ticket, the cash redemption terminal may issue a ticket equivalent to the remaining cash value, which may be redeemed at a cashier desk.

(13)   Cash redemption terminals that are able to issue tickets must maintain a log of the last 35 issued tickets which must include the following details for each record as a minimum:

(a)   time and date;

(b)   amount;

(c)   unique ticket identifier.

(14) Cash redemption terminals that can accept and redeem tickets must maintain a log of the last 35 accepted or rejected tickets that must include the following details for each record as a minimum:

    (a)   time and date;

    (b)   amount;

    (c)   unique ticket identifier;

    (d)   whether the ticket was accepted or rejected.

13. Cashier Terminals

(1) Cashier terminals may be provided by the casino licensee as an interface to the TITO host to allow authorised staff to perform TITO operations.

(2) Cashier terminals may issue tickets, redeem tickets, or do both.

(3) Cashier terminals must communicate in a secure and approved manner with the TITO host using an approved protocol.

(4) Access to the TITO functions provided by cashier terminals must be restricted with account and password control.

(5) Access to the TITO functions provided by cashier terminals may be further restricted and enabled according to staff tiers and privilege levels.

(6) Cashier terminals may have configurable limits for ticket-in and ticket-out relevant to TITO enabled devices as defined in these guidelines. TITO Limits for cashier terminals may be implemented on a system level across all cashier terminals.

(7) The TITO system must be able to record all ticket-out transactions performed on each cashier terminal. The record must include every new entry that has been printed and include the following details as a minimum:

    (a)   time and date;

    (b)   amount;

    (c)   unique ticket identifier;

    (d)   staff member identifier.

(8) The TITO system must be able to record all ticket-in transactions performed on each cashier terminal. The record must include every new entry that has been verified by the ticket-in system and include the following details as a minimum:

    (a)   time and date;

    (b)   amount;

    (c)   unique ticket identifier;

    (d)   staff member identifier.

14. South Australia-specific TITO and BNA limits

SA TITO Limits (Casino Licence)	
The TITO system must not redeem the value of a ticket inserted into a gaming machine if the cash value of the ticket when redeemed exceeds this value	$149.99
Maximum value of a ticket printed by a ticket-out device without manual intervention by a person authorised by the licensee for that purpose	$5,000.00
Expiry of unredeemed tickets from date of issue	12 Months

SA Banknote Acceptor Limits (Casino Licence)	
The maximum credit balance which may exist on a gaming machine beyond which a note acceptor must be disabled due to a High Credit Balance condition	$100
Maximum banknote denomination limit	$50

15. References

Australian/New Zealand Gaming Machine National Standards 2016

Casino Act 1997

Casino Regulations 2013

16. Acknowledgments

The Commissioner has reviewed and used portions from the South Australian Casino TITO Standard v2.3 and Queensland TITO Minimum Technical Requirements v1.1.6 when developing these guidelines. We acknowledge and thank the authors of these documents for providing the basis for the development of these guidelines.

- South Australian Casino TITO Standard v2.3
  Gaming Laboratories International on behalf of SKYCITY Adelaide Casino

- Queensland TITO Minimum Technical Requirements v1.1.6
  Queensland Office of Liquor and Gaming Regulation

17. Revision History

Version	Changes	Release Date
1	Original document published as notified technical requirements	27 July 2020
2	System requirements re-issued as Gambling Administration Guidelines for the purposes of the *Gambling Administration Act 2019*	3 December 2020