

# Investigation of harm minimisation technologies: facial recognition and player card gaming

Report to the Treasurer  
June 2022



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recognition and player card gaming -  
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# Introduction

## MINISTERIAL DIRECTION

The Tasmanian Liquor and Gaming Commission has been directed to investigate the extent to which facial recognition technology and a smartcard-based identification system (hereafter referred to as player card gaming) could minimise gambling harm for electronic gaming machines in casinos, hotels and clubs in Tasmania. A copy of the Ministerial Direction is available at [www.treasury.tas.gov.au/liquor-and-gaming](http://www.treasury.tas.gov.au/liquor-and-gaming) > Community interest > Public consultation > Harm Minimisation Technologies.

To clarify the scope of the investigation, these technologies have been described as:

- facial recognition technology used for the purpose of alerting venue staff of a person entering a venue or gaming area who may be registered as an excluded person on the Tasmanian Gambling Exclusion Scheme database; and
- player card gaming as a card or a digital emulation of a card (e.g. a digital wallet), with the functionality of, or similar to, an account, that at a minimum can identify the player, provides cashless gaming and the ability for players to set loss (spend) and time limits.

## BACKGROUND

### Process undertaken

The Commission has undertaken its investigation in a comprehensive manner, which has included:

- completion of a scoping investigation by Stenning & Associates of the two harm minimisation technologies operating in Australian and international gambling environments. A copy of this report was released to inform the consultation process;
- an initial feasibility assessment by Gaming Consultants International of the technology risks, regulatory impacts, interoperability and barriers, indicative costing and timeframes for implementation in the Tasmanian environment. A copy of the report was released in June 2022;
- a two-phase consultation process to engage with key stakeholders and the broader community on the costs and benefits of implementing these harm minimisation technologies in Tasmania; and
- consideration of national and international research including, but not limited to, the 2021 Social and Economic Impact Study of Gambling in Tasmania and the recommendations of the 2010 Productivity Commission's Inquiry on Gambling.

The Commission would like to acknowledge and thank Stenning and Associates, Neil Spencer from Gaming Consultants International (GCI), the staff of the Liquor and Gaming Branch, and government officers from South Australia, Victoria, New South Wales and Queensland. The Commission would also like to thank those who participated in the

consultation. These contributions have been considered by the Commission in the formulation of this report.

## Guiding principles

In 2018, the Commission developed several principles that guide its work on harm minimisation.

These principles aim to ensure players are:

- provided with the best information available to make an informed choice/decision about participation;
- have the financial capacity to participate;
- spend what they intend to spend;
- supported actively to address 'at risk' and gambling harm, where relevant; and
- under active identification and intervention by venue staff to deal with gambling harm behaviours and patterns of play.

These principles protect all gamblers, not just those at risk of or experiencing gambling harm, from a product that contains elements that may detrimentally affect all players at any given time. These principles have been adopted in the development of recommendations in this report.

# Executive Summary

In developing advice to the Minister, the Commission has considered the:

- views of stakeholders;
- two commissioned reports: *Responsible gambling codes and harm minimisation policies of Australian jurisdictions: A desktop review*; and *Gambling Harm Minimisation: Facial Recognition and Player Card-based Gaming Technologies*;
- 2021 Social and Economic Impact Study of Gambling in Tasmania;
- 2010 Productivity Commission's Inquiry on Gambling; and
- 2016 Review of electronic gaming machine pre-commitment features (Thomas et al.) and other relevant national and international research findings.

The results of this investigation, along with Commission comments on the two harm minimisation technologies, are to be found in the detailed sections of the report. The following serves as a succinct summary of the advice the Commission is presenting to the Minister. It is intended to be read in conjunction with the full report.

## SUMMARY OF FINDINGS AND RECOMMENDATIONS

### Player Card Gaming (PCG) Technology

Arriving at an answer on the extent to which player card gaming for use on electronic gaming machines (EGMs) could minimise gambling harm has proved to be challenging as it depends on the features that are enabled by the card use.

In developing options for the Minister to consider, the Commission is conscious that, while minimising gambling harm is the focus of this Direction, many people use EGMs as a legitimate recreational activity, causing no harm.

The use of cards in EGMs is available now in both casinos in Tasmania. It ranges from a minimum of an anonymous card that is inserted into the EGM in order to collect or transfer credits, to the use of a registered card with mandatory pre-commitment requiring an annual loss limit to be set (based on historical loss data), for membership of the casinos' Premium Player Program.

The introduction of a voluntary PCG system in hotels and clubs would allow people to play EGMs as they are played currently in the casinos. Use of an anonymous card like this would need to be universally mandated to provide some value such as normalising the use of cards in EGM play in all venues. However, this would provide no harm minimisation benefits and would defeat the objective of this exercise, so the Commission does not recommend this option.

The Commission recommends that a registered player card, where the player's identification is verified (by presenting, before the card is issued, ID with photo, name, address and date of birth), be required to play all EGMs in hotels and clubs (as well as casinos). This is an essential starting point. Such a card would allow player activity to be tracked, informing the player's choice around their dollar spend (loss) and time spent on the machines at venues. It would also deal with the issue of (self and venue) excluded players accessing EGMs as they

would not be able to obtain a card in the first place. People who became excluded after obtaining a registered card, would have it deactivated. Guest cards for interstate/overseas players satisfying identification requirements would be available and issued with an expiry date (based on the date of departure) that automatically deactivates the card.

The next step in developing an effective harm minimisation tool is the addition of pre-commitment functionality to the technology. This allows players to set time and loss limits for machines and to monitor their activity against set limits. This system has been available in Victoria (YourPlay) since December 2015 where participation is voluntary. However, while a Victorian evaluation in 2019 assessed the technology as effective, it found the usage was low because it was an opt-in, voluntary pre-commitment system. Hence, its harm minimisation impacts were minimal and overall cost effectiveness poor.

National and international research demonstrates that mandatory pre-commitment is the most effective tool for supporting players to stay within spending/loss limits – that is, to spend what they intend to spend. The Commission notes that the recent Royal Commissions into Crown Perth and Crown Melbourne casinos have both recommended that mandatory full pre-commitment systems (i.e. mandatory registration and mandatory limit setting) for EGMs be introduced to deal with gambling harm in casinos.

The Commission supports the view that mandatory pre-commitment is a strong harm minimisation tool. It has implemented this system in the casinos' PPP where players can set their own limits based on their available historical loss data and their individual capacity to sustain pre-committed losses. A wider implementation of this particular mandatory pre-commitment system to all EGMs into hotels and clubs would not be possible as there is no historical data on which to base an informed decision and no infrastructure in place to assess financial capability to sustain losses at a pre-determined level. Therefore, given the absence of these elements, a mandatory pre-commitment system in hotels and clubs would have to use a standard default maximum loss limit/s. Upon reaching the limit (with warning messages to players as it is approached), play would cease and the card would become inoperable.

It is the Commission's view that initial daily, monthly and annual loss limits could be set, and be reviewed after a period of operation, with any adjustment informed by the data collected. Arriving at what these limits should be is difficult as the levels should not be so low as to significantly impact the recreational player, but at the same time not so high as to provide little protection for those gamblers at risk of or experiencing gambling harm.

Having surveyed the research literature, Australian and Tasmanian gambling prevalence survey data and the system in Norway (and recognising its different context), the Commission favours an initial daily limit of \$100, a monthly limit of \$500 and an annual limit of \$5 000. Players would have the option to set a personal limit below the default limit. The Commission also supports in-principle the capacity for players to set pre-commitment limits above the default maximum if they can demonstrate an ability to sustain that level of spend/loss.

The Commission has focused on mandatory setting of loss limits as research indicates that time limits are less effective (Productivity Commission, 2010) and can be confusing for players, particularly when implemented together with a loss limit (Thomas et al., 2016). The functionality for players to have the discretion to set meaningful time limits could be introduced at a later date. In the meantime, the Commission is not averse to an automatic,

universal break in play where the EGM stops operating after a certain time (e.g. stops for 10 minutes after two hours of continuous play).

The Commission also supports the PCG being applied state-wide with pre-commitment limits being monitored centrally. This means that player activity and progress towards pre-commitment limits will apply across all gaming venues. The only exception proposed is PPP members, who already have mandatory loss limit setting based on historical losses. The Commission may review this exception in due course.

The Commission has considered the option of cashless gaming, described by GCI as “the transfer of credits to and from a gaming machine from an account stored in a venue based central player card gaming application” (2022, p. 26). The Commission noted stakeholder arguments for and against cashless gaming and, on balance, believes it is an appropriate time to implement, provided that measures are also introduced to reduce risks such as increased player expenditure. For this reason, cashless gaming should be limited to funds being loaded onto a card by cash or a debit card via EFTPOS at a cashier desk, meaning coins would no longer be inserted into EGMs at hotels and clubs.

The overall cost of developing and implementing a state-wide PCG system in all licensed venues is likely to be in the order of \$10 million. Additional costs are noted in the section ‘PCG Costs’ (p. 20).

It is estimated that development of the system and its technical aspects would take 24-30 months and a trial period would need to occur before full implementation.

### Recommendations

The Commission recommends:

- the implementation of a mandatory registered card for EGMs in all Tasmanian hotels, clubs and casinos;
- the registered card system should operate as follows:
  - require registration to participate for all players with a single card issued to each player with a PIN (guest cards to be issued with an expiry date);
  - be cashless, with funds loaded onto cards using cash or debit card via EFTPOS only at a cashier desk;
  - provide messaging about player activity, such as money lost or won and time spent at EGMs;
- pre-commitment functionality that should be mandatory for all players, state-wide and simple to use for all gamblers;
- the pre-commitment system should operate as follows:
  - prescribe maximum concurrent default loss limits, initially set at a daily limit of \$100, monthly limit of \$500 and annual limit of \$5 000. These limits should be reviewed after a period of operation, with any adjustment informed by the data collected;
  - players have the discretion to set lower loss limits (taking effect immediately). Any subsequent increase **up to** the default loss limits should take effect after a cooling off period;

- players should be able to apply for higher limits above the default loss limits where they can demonstrate the financial capacity to sustain those losses (in accordance with a process to be determined by the Commission);
  - when a loss limit is reached, gaming activity will not be allowed until the next default period;
  - messaging about progress towards limits will be accessible to players; and
  - functionality should be available to implement the setting of play limits for breaks in play and maximum play periods. These limits are to be considered by the Commission based on further research, but initially an automatic break of 10 minutes after two hours of continuous play could be introduced that applies to all players.
- to support effective state-wide operation, the system should be administered centrally, ideally by the Licensed Monitoring Operator;
  - the system should allow aggregated, de-identified data to be used by the Commission to inform gambling harm minimisation strategies;
  - a rigorous staff training program must be developed covering system operation and responsible service of gambling requirements; and
  - the PPP mandatory pre-commitment scheme should continue to operate under a separate regulatory process.

## Facial Recognition Technology (FRT)

There is little doubt that FRT is an effective tool in minimising harm for those people who have already self-excluded (currently 248), noting this protection is limited only to the smaller subset of people who seek to enter a venue from which they are excluded. The technology could also assist venue operators who have excluded people (currently 110).

It is the Commission's view that FRT does not have broad scope as a tool for minimising harm from gambling, rather it could be considered an additional tool to mitigate already existing harm.

It does not operate as a preventative tool for people who may be at risk of gambling harm but who have not self-excluded. The 2020 Tasmanian gambling prevalence survey found that just over 90 per cent of 'at risk' gamblers have not sought help for their gambling because they believed they did not have a gambling problem or believed they could sort the problem themselves (SEIS, 2021). While not all these people would need help by way of exclusion from a venue, it demonstrates some of the limitations of FRT as an effective measure to reduce gambling harm more broadly.

Nevertheless, in the absence of anything else to minimise harm, FRT would be effective for the small group of people identified above. Provided the privacy issues discussed under 'Implementation considerations' (p. 25) are able to be addressed, a system similar to that introduced in South Australia would be suitable for implementation in Tasmania, with modifications required for the existing Tasmanian Gambling Exclusion Scheme database (TGES). The Commission strongly recommends that any introduction must be accompanied by a rigorous staff training program. The overall cost of implementing FRT in all licensed venues and updating the TGES is likely to be in the order of \$2.6-3 million. System development would require a minimum of 20 months and a trial period would need to occur before full implementation.

### **Recommendation**

- The Commission does not recommend implementation of FRT as it is not an effective tool for wider prevention of harm in gaming venues in Tasmania.

### **Alternative Option**

- In the absence of the introduction of a PCG system, the implementation of an FRT system similar to South Australia using a venue operated system, integrated with the TGES, to identify excluded persons could be considered. This option is subject to further consideration of the matters outlined in the section 'Implementation considerations' (p. 24), including significant concerns regarding privacy.

# Tasmanian Context

## OPERATION OF EGMS

As at 31 May 2022, there are 3 399 EGMS in 95 hotels, clubs and casinos across the State.

## TASMANIAN GAMBLING PARTICIPATION

The results of the 2020 gambling prevalence survey (SEIS, 2021) indicate participation rates in gambling in Tasmania have steadily decreased, from 72 per cent participation in some form of gambling in 2008 to 47 per cent in 2020. The results also identified 6.4 per cent of Tasmanian adults represent some level of gambling risk (see Figure 1).

**Figure 1 - Portion of adults in Tasmania at gambling risk, 2020**



Note: The categories of gamblers are as defined by the Problem Gambling Severity index.

EGM gambling was identified as one of the activities most associated with moderate-risk and problem gambling (SEIS, 2021). Ten per cent of the Tasmanian adult population played EGMS at least once during the 12 months prior to March 2020. Representation of moderate-risk and problem gamblers playing EGMS is 12 per cent (SEIS, 2021).

While Tasmania has the lowest level of expenditure (also referred to as spend or losses) on EGMS per adult compared nationally, EGM expenditure represents a significant percentage of total gambling expenditure, accounting for 64.1 per cent of the total gambling spend for 2018-19 and 48.3 per cent for 2020-21.

## CURRENT TECHNOLOGIES IN USE

### Card-based gaming

Card-based gaming operates at the two casinos. Registered and unregistered cards are available to play EGMs. Unregistered cards are not linked to a loyalty program, do not record player data and expire after 48 hours of inactivity. Registered cards are used by members of the casinos' two loyalty programs (Federal Rewards Club and the Premium Player Program) enabling them to earn loyalty points. Information about the individual and their player activity is recorded. Pre-commitment is mandatory for members of the PPP. The Program is governed by [Rules](#) and [Standards developed by the Commission](#).

## TASMANIA'S CURRENT HARM MINIMISATION MEASURES

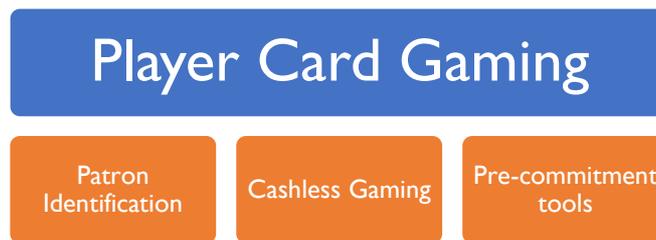
Tasmania has implemented a mixture of controls to regulate the operation of EGMs to minimise potential gambling harm. These include:

- the *Responsible Gambling Mandatory Code of Practice in Tasmania* prescribing controls specific to EGM activity, which research has found compares favourably to other jurisdictions in terms of harm minimisation and responsible gambling controls (Stenning & Associates, 2021);
- restricting EGM features including reducing the maximum bet limit to \$5, maximum of 30 possible lines that can be played, and a cash limit of \$500 for note acceptors on EGMs in casinos;
- capping the number of EGMs per venue and state-wide; and
- mandatory pre-commitment for the casinos' PPP.

# Player Card Gaming

## BACKGROUND

For the purposes of this report, player card gaming (PCG) has been defined as a card or digital representation of a card with functionality of, or similar to, an account that can identify the player, provide cashless gaming, and enable players to set spend/loss and time limits. PCG systems generally have one or more of three main components described by Stenning & Associates (2022) as:



- Player identification:
  - A player must register their details to access the card.
  - It can include identification of excluded persons.
- Cashless gaming:
  - A cashless payment method that can interface with the card.
  - Includes ticket-in ticket-out (TITO) systems, card based cashless systems, account-based systems and mobile/digital wallets.
- Pre-commitment tools:
  - features such as time and spend/loss limits, tracking gambling activity and prompting breaks in play;
  - mandatory or voluntary limit setting; and
  - with full (binding) limits or partial (non-binding) limits.

Stenning & Associates (2022) noted that PCG systems with pre-commitment (both voluntary and mandatory) have been implemented internationally (Norway, Sweden, Nova Scotia) and in Australia (Victoria, Queensland). Variations in design have made it somewhat challenging to directly compare effectiveness (discussed below). Apart from the Commission's PPP mandatory pre-commitment scheme, the only other full implementation of a PCG system (i.e. mandatory registration and mandatory limit setting) currently operating is in Norway (introduced in 2009).

A detailed description of the required technology components has been provided by GCI (2022), but briefly, the key elements include:

- a player card - to identify a person;
- player card reader (attached to the EGM) - to associate the person with the gaming activity;

- player display - an area of the EGM that is controlled by an interface device;
- interface device - an electronic component that interchanges information between the EGM and PCG application; and
- central PCG application - to identify the person playing and monitor/measure activity.

## HARM MINIMISATION EFFECTIVENESS

Research, both in Australia and overseas, shows that the ability for a player to control the amount of time and money spent/lost gambling can be an effective way of minimising gambling harm. Evidence indicates that mandatory full pre-commitment is the most effective means for supporting players to stay within spending limits (Rintoul & Thomas, 2017; Sulkunen et al., 2018).

In particular, an evaluation of Norway's mandatory full pre-commitment system showed the system reduced gambling losses and calls to gambling helplines, without considerable impact on player enjoyment (Thomas et al., 2016).

Stenning & Associates (2022) notes Victoria's evaluation in 2019 assessed YourPlay as an effective technology system, but found the usage (and consequently harm minimisation impact) was low due to it being an opt-in, voluntary pre-commitment system. Other PCG systems were evidenced as able to minimise gambling harm (where research was available), including in Queensland, New Zealand and Nevada (USA). However, similarly to YourPlay, evidence of weakness or adverse impacts of these systems broadly related to low usage, mostly driven by privacy concerns, players not seeing a need for or the benefits of using PCG systems, and a lack of promotion of PCG systems by venues. Nova Scotia's partial pre-commitment system "MyPlay" was disabled following similar issues, as well as concerns from operators regarding a decline in revenue and system design problems (Rintoul & Thomas, 2017).

The only evidence of adverse impacts of PCG identified by Stenning & Associates was the potential for players to spend more using cashless payment methods. In this regard, recent research identifies potential improvements for cashless gaming that could reduce potential harms, for example, setting EGM credit meter transfers and card balance limits including aligning with cash withdrawal limits and implementing various ways players can access card balance information while playing and away from the EGM (Hare, 2020).

The Productivity Commission Inquiry into problem gambling in Australia (2010) considered regulatory options for pre-commitment strategies and recommended a staged adoption of full pre-commitment systems across Australia. The Productivity Commission concluded that:

*... pre-commitment is a strong, practicable and ultimately cost-effective option for harm minimisation. It overcomes some of the existing severe deficits in achieving self-control for problem gamblers and for genuine informed consent by many other customers.*

*While recognising that even a full pre-commitment system cannot be a 'silver bullet', it may ultimately take pressure off other regulations aimed at harm minimisation. If it is sufficiently effective, then some of the more prescriptive regulations could be relaxed or revoked.*

While a national approach to implement a full pre-commitment scheme was considered by a previous Federal Government around that time, with further research to be undertaken by

the Productivity Commission, the initiative was ultimately wound back after a change in Government.

More recently, two Royal Commissions inquired into the integrity of casino gaming operations at Crown Melbourne (October 2021), and Crown Perth (March 2022). Both Royal Commissions recommended the introduction of full, mandatory, binding loss pre-commitment systems as a measure to mitigate gambling harm. It was recommended the systems include an ability to set weekly time and loss limits (as well as daily/monthly limits in Victoria). The Royal Commissions also recommended that general play period time limits be introduced.

## ANALYSIS

In determining the design of a mandatory pre-commitment system for Tasmania that would achieve the most impact in minimising gambling harm without diminishing player enjoyment (refer 'Recommendations', p. 6), the Commission finds benefits to include the following:

- players are unable to exceed loss and/or time limits that do not significantly impact the average player but do provide protection from harm. Taking into account that there is little evidence available, and looking at the research literature, prevalence survey expenditure estimates and the system in Norway (recognising its different context), the Commission considers the limits proposed are a reasonable starting point in the absence of Tasmanian data for hotels and clubs;
- player choice is maintained by enabling individuals to set their own personal limits, with the option to apply a lower limit than the default or apply for higher limits, as their discretionary spend allows;
- the process will have negligible impact on recreational gamblers if the sign-up process is simple and maximum default limits are reasonable;
- applying pre-commitment to all players destigmatises the perception that it is only a tool used by gamblers at risk of or experiencing gambling harm;
- excluded players would be identified up front and be unable to participate; and
- de-identified and aggregated data could inform research and regulatory purposes.

The Commission notes the following limitations of a mandatory pre-commitment system but has determined that these are outweighed by the benefits:

- players may find this intrusive and do not want or need this level of control;
- a perception that signing up to the system would be overly burdensome on infrequent gamblers;
- any initial default limit will likely be criticised; and
- implementation of a state-wide system with concurrent default loss limits means the casinos will need to make changes to its proprietary system.

## Default limit setting

Setting monetary limits (short i.e. daily, and longer-term i.e. weekly, monthly) is identified as the best mechanism to control impulsive over-spending and to help players think about the level of gambling loss as part of their overall budget. (Thomas et al., 2016).

The Commission has chosen to use loss (i.e. the total amount gambled (turnover) less the amount won by players). As previously noted, this is also referred to as expenditure or amount spent. For example, if the daily limit is \$100 and a player deposits \$100, and then subsequently wins \$30 (credit on machine is \$130), their limit is not reached until the \$130 has been spent. This is consistent with the Commission's principle of spend what you intend to spend and the operation of the PPP.

There is a lack of consensus about an appropriate standard default limit.

To inform the maximum default loss limits in Tasmania, the Commission reviewed Australian and Tasmanian prevalence survey data and the model currently operating in Norway.

Table 1 shows the daily, monthly and annual limits for low and high gambling spend based on 2013 Australian gambling prevalence data (Thomas et al., 2016).

**Table 1 - Australian Gambling Research Centre**

Spend	Low	High
Daily	\$40	\$125
Monthly	\$80	\$500
Annual	\$960	\$6 000

Note: Spend is also referred to as loss or gambling expenditure.

### **SEIS 2020 Prevalence Survey**

The Tasmanian prevalence survey data relies on self-reported gambling expenditure data, which may be variable due to it being based on a person's recollection. However, it provides an indication of volume or intensity. Those who gambled were asked to estimate the highest amount per session spent in the last 12 months. A session has been taken to be comparable to a day's play. For EGMs, the estimates based on survey responses were:

- average spend - \$51/session; and
- median (i.e. the middle) spend - \$30/session.

Despite some differences to the Tasmanian context, Norway offered useful insight into default limits. Norway's Video Lottery Terminals (VLT) (EGM equivalent) are offered as lower intensity machines and higher intensity machines. Table 2 outlines daily and monthly loss limits for the higher intensity machines, which operate more like Australian EGMs.

**Table 2 - Norway daily and monthly VLT loss limits**

	Belago - higher intensity (NOK)	AUD equivalent <sup>1</sup>
Daily	900	\$132
Monthly	4 400	\$650

Notes: 'Intensity' refers to available machine features. <sup>1</sup> Based on 2022 exchange rate.

The Commission's view is that initial maximum default loss limits should be set for daily, monthly and annual limits, and reviewed after a period of operation, with any adjustment informed by the data collected. Players will have the option to set a personal limit below the default loss limits.

A process for determining the setting of pre-commitment limits above the maximum default limit would need to be developed and could be informed by the development of the model that exists already in the PPP (Standards 6.6 and 6.7).

Instead of using a divisor, the Commission recommends concurrent limits to provide an overlay of protection to further assist players spend only what they can afford. The PCG system will check the three limits before each play session and gambling cannot occur if any one of the loss limits is reached until that loss limit period refreshes (starts again).

An initial default loss daily limit of \$100, monthly limit of \$500 and annual limit of \$5 000 are considered to be in keeping with the above examples and not likely to impact recreational gamblers. In theory, the most that could be lost in the shortest amount of time is \$500 over five days, at which point a stay on gambling is enforced until the monthly limit refreshes. While this is a very high level of loss over a short time, venues would still have a duty of care to their players to observe signs of harmful behavior and intervene to check the person is not at risk of harm.

### ***Time limits***

Time limits serve to limit the length of time gambling can occur within a wider timeframe and can be tailored to individual requirements to help control behavior and to limit the intensity of play. Research has noted time limits tend to be less frequently used than monetary limits (Thomas et al., 2016). This does not mean the Commission sees no merit in time limits, and notes that Norway provides for a pause in play of 5 minutes after each hour of play and allows personal breaks in play (i.e. set play periods) and permanent self-exclusion. The Commission also notes recommendations arising from the two Royal Commissions into the integrity of casino gaming operations at Crown Melbourne (October 2021) and Crown Perth (March 2022), which recommended interim play period time limits (breaks in play and maximum play periods) be introduced, to be reconsidered in light of further research.

Accordingly, the Commission's view is that Tasmania's pre-commitment system should include functionality to enable the setting of play limits including breaks in play and maximum play periods. While loss limits are being embedded, the Commission would further consider time limits based on data and further research.

The Commission also notes the increase in harm being caused for people who play continuously for more than two hours (Productivity Commission, 2010; Uniting Church of Australia, 2022). The Commission notes a 2009 study by Schottler Consulting for the Victorian Government, where a large majority of recreational gamblers said a mandatory break of 20 minutes after two hours of play would not reduce their enjoyment, but moderate risk and problem gamblers reported much greater impact on their time and money spent (Productivity Commission, 2010). The Commission's view is that an automatic break in play of 10 minutes after two hours of continuous play should be implemented initially and apply to all players. This is broadly consistent with the recommendation of the Perth Royal Commission of a minimum 15 minute break after three hours of continuous EGM gambling.

## STAKEHOLDER CONSULTATION

Industry stakeholders did not support a mandatory pre-commitment system, saying it would unfairly restrict low risk and recreational gamblers and may encourage gamblers to seek out less regulated gambling products. The Victorian YourPlay system limitations, discussed in Stenning's Report, were highlighted by the Tasmanian Hospitality Association (THA) as evidence the technology was not a viable harm minimisation measure. The THA also suggested a mandatory pre-commitment system would be cumbersome to administer and may not provide assistance to those when it is most needed. Federal Group recommended exploration of other harm minimisation options and technologies, for example, risk-based tools, noting Tasmania's existing robust regulatory environment and the declining gaming and EGM spend.

Conversely, community sector and other stakeholders including elected representatives proposed that a mandatory card with evidence-based harm minimisation measures will provide a measurable reduction in gambling harms. Features would include mandatory implementation with universal pre-commitment limits, allowing individuals to make informed choices about their gambling activity and spend. International research was cited regarding implementation of pre-commitment systems, refuting the argument that EGM users would turn to other forms of gambling when they reached their spending limit. Mandating usage may reduce the stigma associated with accessing gambling harm prevention tools. Registration of all gamblers would ensure that self-excluded people are unable to participate in gaming and may render FRT unnecessary. Community sector organisations and elected representatives supported time and loss limits for EGM players, starting from a standard default limit where upon reaching a limit, play would cease. In the circumstance where a player wishes to increase their limit, stakeholders suggested a defined process which incorporates a 24-hour lock-out or cool-off period to reduce the risk of impulsive activity.

In regard to cashless gaming, community sector stakeholders raised concerns about the unintended consequences of implementation, referring to the frictionless nature or decreased pain of payment when using a card or digital wallet instead of cash. Cashless gaming may reinforce intense and uninterrupted gambling, increasing the likelihood of harm. Federal Group referenced the lack of evidence to support cashless payments in a gaming environment as an effective form of harm minimisation. Other stakeholders raised concerns that it may facilitate money laundering. The THA, conversely, was in favour of cashless gaming to reflect the broader social trend away from hard currency. It also suggested cashless gaming offers a solution to the occupational health and safety issue associated with managing heavily weighted coinage.

# Facial Recognition Technology

## BACKGROUND

FRT is an effective way to detect a known subject by comparing an image captured by a video camera against a control image stored in a system, producing an alert when a match is found using biometrics i.e. face measurements to identify a person (Stenning & Associates, 2022; GCI, 2022).

In a gaming setting, FRT can be used to limit access for self-excluded people to terrestrial gaming venues, such as in casinos, hotels, and clubs. Human intervention is still required to both confirm a person's identity when a control subject is recognised, and act appropriately in order to assist the excluded person who has entered the venue.

FRT technology has been implemented in South Australia, New Zealand and the United Kingdom as a tool for identifying excluded players entering gaming venues (Stenning & Associates, 2022). In South Australia, any gaming venue with at least 30 EGMs, and at least one machine having a bank note acceptor, must use an approved FRT system connected to the exclusion system. This allows detection and alert of venue staff to a person entering the gaming area who has matched a control image in the system. The FRT system in each venue downloads and securely stores control images relevant to the venue, and staff are required to respond to alerts and enter details of intervention steps undertaken (GCI, 2022). The Commission is of the view that an FRT system that effectively assists venues to identify excluded persons would assist in mitigating existing harm.

## HARM MINIMISATION EFFECTIVENESS

Self-exclusion programs provide an opportunity for individuals experiencing harm to restrict themselves, or be restricted, from accessing locations causing the most harm while treatment can be undertaken (Alliance for Gambling Reform, 2022).

FRT is an effective tool in minimising further harm for people who have self-excluded, specifically those who attempt to breach an exclusion by entering a venue. The number assisted is small compared to the number of people playing EGMs at least once in a 12-month period (estimated at nearly 20 000 based on the 2020 prevalence survey).

Table 3 below shows at 31 May 2022 there were 353 gambling exclusions in Tasmania. While the number of people voluntarily excluding is relatively stable, venue operators have been increasingly applying exclusions (with varying image quality of the person).

**Table 3 - Total number of excluded people registered in TGES as at 31 May 2022**

Exclusion Type	Number of excluded persons	Number of persons with photos
Self-exclusion <sup>1</sup>	248	248
Third party exclusion	1	1
Venue operator exclusion <sup>1</sup>	110	85
<b>Total number of excluded persons<sup>2</sup></b>	<b>353</b>	<b>328</b>

Source: Department of Treasury and Finance, 2022

<sup>1</sup> Includes 6 people with both venue and self-exclusions (all have photos uploaded).

<sup>2</sup> Totals only count person once with both venue and self-exclusions.

As noted in many of the submissions, FRT does not offer any predictive capabilities and it does not operate as a preventative tool for those people who may be at risk of gambling harm but who have not excluded. This is supported by the 2020 prevalence survey which found that just over 90 per cent of 'at risk' gamblers have not sought help for their gambling because they believed they did not have a gambling problem or believed they could sort the problem themselves (SEIS, 2021). While not all these people would need help by way of excluding from a venue, it demonstrates some of the limitations of FRT as an effective measure to reduce gambling harm.

## ANALYSIS

In determining technology that would deliver the most impact in minimising gambling harm, the Commission considers FRT would be the least effective due to its limitations noted below. Nevertheless, in the absence of a PCG system that provides broader protections and prevents excluded people from gambling, an FRT system similar to South Australia could be considered (refer to 'Recommendations', p. 8). The Commission finds benefits of this type of FRT system to include the following:

- venues using FRT may be able to better identify self-excluded individuals otherwise not captured by staff alone; and
- FRT integrated with an upgraded TGES database would enable the Commission to gather more reliable data around breaches and intervening actions taken by a venue.

The Commission finds the following limitations of an FRT system and considers they outweigh the benefits:

- FRT does not have a broad scope as a tool for minimising harm from gambling; rather it could be considered an additional tool to mitigate existing harm;
- the scope of FRT is limited to those who are already excluded from gambling; and
- while very accurate in ideal conditions, accuracy of FRT systems can be impacted by the quality of the control images, illumination of the setting, speed of travel of the person, quality of the device taking the image, camera angle, the FRT algorithm and attempts to disguise appearance.

## STAKEHOLDER CONSULTATION

Industry firmly supports implementing FRT, noting inefficiencies with the current exclusion scheme, including cumbersome administrative processes. Benefits identified include: a cost-effective and streamlined means to identify excluded people in real-time, and allow the immediate provision of support through a potential automated notification to community support organisations. FRT systems are highly accurate and the mere presence of a reliable and proven facial recognition system may act as a deterrent for excluded people to attempt entry to gaming premises. To be effective, Federal Group noted FRT will be needed at the entry points to all gaming areas containing EGMs.

Community sector and some elected representative stakeholders expressed concern, pointing to the lack of evidence that this technology will prevent or reduce harm. Any FRT would be limited to identifying those already excluded. Some stakeholders referred to the biometric surveillance literature and the concern that FRT, if combined with other biometric technologies (e.g. identifying player behaviour or gambling preferences to target marketing), may encourage gambling.

Common themes emerged regarding the implementation of FRT, specifically concerning the privacy considerations, regulatory and training requirements, the current exclusion scheme amendments and evaluation.

There was concern that the potential risks of the technology, including data management, privacy and cost-effectiveness, outweighed any benefit. Community sector organisations highlighted the opportunity cost of pursuing facial recognition over alternative mechanisms that may provide more substantive reduction to harm.

There was broad consensus that the implementation of a PCG system that required mandatory registration would effectively render FRT redundant.

# Costs and Implementation

## PCG COSTS

Technical development of a PCG system, incorporating pre-commitment capability across all EGMs in hotels and clubs in Tasmania, has been costed in the order of \$10 million. Player card readers and interface devices have been budgeted at \$3 200 per EGM based on data from Victoria. A further \$2 million would likely be required for Electronic Monitoring System development.

There will be additional costs (yet to be quantified) associated with Tasmanian casino systems needing to interface with a statewide PCG system, monitoring fees, compliance activities, staff training, ongoing system connection, software licensing fees and upgrades. This does not include non-essential equipment like cash redemption terminals (electronic cashiers). Further work will be required to fully cost implementation.

The technical solution selected, that is, a card that players use, will have a financial impact on implementation. Of the available options considered by GCI (2022), the magnetic stripe card represents low cost, easy-to-use and familiar functionality, and is the Commission's preference. If newer card reader technology is selected, the costs per EGM will increase.

Inclusion of functionality to support a statewide system from the outset delivers a one-off development cost for industry and the Monitoring Operator.

## PCG IMPLEMENTATION

The development and implementation of a statewide PCG system will take time to coordinate with hotel, club and casino licence holders and the new Monitoring Operator. GCI (2022) indicates the timeframe for developing the technical aspects of a PCG with a pre-commitment system would be around 24-30 months. An additional six months would be required to conduct a field trial and complete the statewide rollout.

A phased implementation program is proposed:

- development of the system design, business requirements and regulatory framework (including any legislative amendments);
- establishment of the statewide Monitoring Operator pre-commitment system including capability to interact with casino system arrangements;
- provision of venue training and a public education campaign;
- deployment of PCG equipment in a test field environment, prior to widespread installation and operation, to ensure system operability, interaction with the Electronic Monitoring System, and overall system usability;
- following a successful trial period, full deployment of equipment statewide; and
- ongoing monitoring and compliance auditing.

Following a period of full operation, the Commission will assess the data collected to evaluate harm minimisation effectiveness and the limit setting requirements. The timeframe and key steps to implement the approach are detailed in Appendix A.

## Implementation considerations

The following matters require further consideration and will need to be addressed should the Government determine to proceed with implementing a PCG system in Tasmania.

### *Establishment of a state-wide system*

In Victoria, the YourPlay system is hosted by the monitoring operator, which holds all player information. In Tasmania, the same model could be adopted although would require cooperation between the casino operators (that will continue to use a proprietary PCG system) and the Monitoring Operator. There are two options for implementing a consistent PCG framework in Tasmania:

#### **Option 1 - Centralised host system**

The preferred option is for all gaming premises to use the Monitoring Operator's host PCG system. This will centralise the management of registered cards and pre-commitment limits and facilitate storage of all player data. A host system will also simplify compliance activities and the implementation of future system changes.

Some of the pre-commitment options proposed for Tasmania's PCG system are contemporary such as concurrent default limits (refer 'Recommendations', p. 6). The casino PCG system was not designed with some of these options and would need enhancements particularly to accommodate concurrent limits. The costs of any system changes are unknown until a position is reached on what pre-commitment features will be implemented.

Once the casino PCG system enhancements are completed, it will also need to interface with the Monitoring Operator's host system through the development of an Application Programming Interface (API). It is estimated this cost will be up to \$200 000.

#### **Option 2 - Separate casino system**

Casino operators could independently issue registered cards and manage standard default pre-commitment limits for their players, removing the need for an API. However, the same system changes mentioned above to accommodate new limits would still be needed. More importantly, the separate systems would allow players gambling in either the casino system or the hotels and club system to register for a card in each system (i.e. two cards effectively allowing an annual loss limit of \$10 000). While this is still an improvement on the current situation, it potentially exposes these players to increased gambling harm.

The costs savings that can be achieved under this option are outweighed by the harm minimisation benefits a centralised host system achieves with pre-committed limits progressively applied across all gambling premises in Tasmania.

### *Card registration process and privacy considerations*

The card registration process will need to be as simple as possible, be accessible for players (at venues and/or online) and meet minimum requirements.

The pre-commitment card sign-up process will require each player to consent to the capture of their personal information. This information will need to be managed according to applicable privacy and personal information legislative requirements.

Consideration will also need to be given as to what information is displayed on the in-machine display and the in-venue kiosks to ensure that personal information is not easily visible to people passing.

### *Discretionary limit setting process*

Policy settings need to be determined relating to pre-commitment limits for players who have the capacity to spend/lose above the default limit, for example, the assessment process to prove capacity to sustain loss. Policies will also need to determine who approves the limits and when players are permitted to amend their previously set limits, including any cooling off period requirements.

### *Cashless gaming*

Introducing a cashless system across multiple venues is complex, as is implementing a system that incorporates current casino cashless gaming. At best, the cashless system will need to be supplied by the Monitoring Operator and balances recorded for cards at each venue. This would need to be negotiated with the successful LMO provider.

Conceptually, separate accounts could be created for multiple venues to enable players to use a single card at those venues. However, due to a number of factors, players could only play the balances loaded on the card at the respective venue. It is possible that balances at each venue could be shown on kiosks and will need to be developed further at the design stage.

While the setting of loss limits will provide player protection, policy settings need to be determined to reduce potential harms of cashless gaming e.g. requiring that a card can only be uploaded with credit via cashier, creating a break in play.

### *Staff training*

The majority of stakeholders noted effective staff training is critical to an effective harm minimisation scheme. Industry stakeholders suggested this training should be provided by industry and the THA suggested it is best placed to manage this.

The Commission is of the view that industry engagement and ongoing staff training are critical and will likely need to involve the Monitoring Operator as well. The training content and delivery options will need thorough consideration and must address responsible service of gambling requirements.

### *Loyalty Programs*

A number of community sector stakeholders expressed concerns with linking a pre-commitment scheme to loyalty schemes, including the Uniting Church of Australia and Alliance for Gambling Reform, who suggested it may entice people to gamble.

The Commission has commenced a review of the *Responsible Gambling Mandatory Code of Practice for Tasmania* with a focus on its effectiveness in light of the Government's future gaming market reforms. The Commission has undertaken to review the player loyalty program framework and will investigate whether controls are adequate where pre-commitment is attached to loyalty schemes.

### *Review of existing harm minimisation measures*

Development of the regulatory framework will necessitate a review of existing harm minimisation measures that may be impacted, for example the Commission's Code, standards and rules. As part of this process, the Commission will also consider removing secondary controls that may no longer be necessary (for example, Code requirements concerning clocks and coin change machines).

## FRT COSTS

Significant upgrades of the TGES would need to occur to enable effective integration for the exchange of information with a venue based FRT system, estimated by GCI at \$300 000. Additional costs may be required to further upgrade the TGES to ensure the system is capable of simultaneously operating and responding to a large number of venues (i.e. requests for images and data for excluded persons for a particular venue).

At a venue level, immediate costs are estimated by GCI at \$25 000 per venue, covering costs for computer equipment, FRT software, devices, cables, and cameras. The cost increases depending on the number of cameras that need to be installed on site. GCI (2022) advised cameras supporting FRT can cost between \$1 000 to \$5 000 each. The Commission is of the view that most layouts for Tasmanian hotels and clubs will have adequate FRT camera coverage with two FRT capable cameras covering entry points to gaming areas, which is consistent with the findings in GCI's report. There will be some venues with more complex layouts that will need a third camera to be installed to provide full coverage of all entry areas.

Venues may incur increased operating costs covering:

- licence/maintenance fees for an FRT system;
- increased staff training costs for system match intervention; and
- increased internet data transmission costs (GCI, 2022).

## FRT IMPLEMENTATION

In Tasmania, the most practical and cost-effective implementation of FRT systems as a harm minimisation measure would be the combination of an upgraded TGES (with operational responsibility remaining with the Liquor and Gaming Branch) and in-venue FRT systems operated by venue operators. This approach is supported by the GCI report which indicates development within a 15-20 month period. An additional minimum of six months will be required to conduct a field trial and implement statewide.

This is the same approach implemented in South Australia.

A phased implementation program is proposed involving:

- development of the TGES database specification, business requirements and regulatory framework relating to FRT installation by venues (including any legislative amendments, rules, standards and form of contract between the venue and FRT provider);
- procurement process to upgrade the TGES database;

- provision of venue training and public education campaign;
- venue installation of FRT equipment in a test field environment prior to widespread installation and operation, to ensure interaction with the TGES, and overall system usability;
- following a successful trial period, full deployment statewide by venues; and
- ongoing monitoring and compliance auditing.

The timeframe and key steps to implement the approach are detailed in Appendix B.

While the technology components of an FRT system are available for purchase, there are several steps to address before an FRT system could be contemplated in Tasmania. These are discussed below.

## Implementation considerations

The current TGES system would need to be reviewed to determine amendments required to ensure that images and data collected from excluded persons can be stored in an FRT system at a venue. This may include seeking authorisation from currently excluded people to store images and other data in an FRT system at a venue.

Broadly, the use of FRT is contentious. Consideration will need to be given as to whether there is a need to amend, or introduce, legislation that regulates the use of excluded persons' data with the operation of FRT in Tasmania which must have adequate consumer protections and comply with the Australian Privacy Principles (Commonwealth), the Personal Information Protection Principles (Tasmania), the Australian Human Rights Commission's Human Rights and Technology Final Report (2021) and any other relevant legislation. The Commission notes that the South Australian legislation and licence conditions to introduce FRT predate the delivery of the AHRC's Final Report.

While all gaming venues are required to have a CCTV surveillance system operating and recording continuously when gaming is in operation (under the [Technical Standards for CCTV surveillance](#)), these surveillance systems cannot be used with an FRT system. Venues will need to purchase new equipment for the purpose of matching and alerting individuals against the TGES database.

The new technology should be trialed before a statewide rollout. The Commission does not consider the existing trial being undertaken by the THA to be a sufficient demonstration because it does not interact with the TGES database, which in its current form, would not be suitable for inclusion in this trial.

Further considerations include:

- the development of training for staff, with stakeholders identifying the current Responsible Conduct of Gambling course is due for review; and
- the timing of implementation of FRT state-wide.

# Appendix A

## PCG IMPLEMENTATION STEPS

**Table 4 - Proposed implementation timeline**

Stage	Key steps	Responsibility	Timeframe
Government Announcement	<ul style="list-style-type: none"> <li>Respond to Commission’s recommendations</li> <li>Determine position on how costs will be funded</li> <li>Issue Ministerial Direction to Commission to implement the PCG framework</li> </ul>	Government	6 months
Legislative amendments	Introduce any changes - if required - to legislation and/or regulations (e.g. monitoring fees)	Government	6-9 months
Develop communication strategy	Advise stakeholders of proposed actions and timeframes for implementation including further intended consultation, monitoring and progress reports	Commission	24-30 months from start of project to system development
System Design	<ul style="list-style-type: none"> <li>Review pre-commitment system operational requirements, develop system specifications and business requirements</li> <li>Engage expert consultant to assist with system design</li> </ul>	Commission (Government to approve outstanding policy issues)	
Establish regulatory framework	<ul style="list-style-type: none"> <li>Develop technical standard for pre-commitment systems including player card technology, player display and messaging at a gaming machine, data storage and retention, privacy, security controls and system operational parameters</li> <li>Amend existing technical instruments as required (e.g. card based gaming systems technical standard, Gaming Machine National Standard, Code, Commission Rules)</li> <li>Develop operational guidelines for venue operators including requirements relating to privacy, participant assistance (e.g. for setting limits), player card availability and registration</li> </ul>	Commission (Government to approve outstanding policy issues)	



Stage	Key steps	Responsibility	Timeframe
	requirements, and reporting requirements <ul style="list-style-type: none"> <li>• Develop training module for venue staff on the operation of the system and responsible service of gambling</li> <li>• Prepare education resources for the public</li> <li>• Engage expert consultant to assist with technical standards</li> </ul>		
Monitoring operator and casino system arrangements	<ul style="list-style-type: none"> <li>• Establish monitoring arrangement with LMO for hotels/clubs</li> <li>• LMO to purchase or develop player card gaming system (PCG) in accordance with Commission's standards/rules (and certification by independent tester)</li> <li>• Establish requirements (including contract) for casino operators to use same system and develop API to allow access to LMO pre-commitment system functions.</li> </ul>	Government  LMO  Commission/ LMO/Casino	
Contract for PCG equipment and installation	<ul style="list-style-type: none"> <li>• Approval of contract between prescribed licence holders</li> <li>• Approval of gaming equipment.</li> </ul>	Government  Commission	
Staff training	Staff training commences	Commission	Ongoing
Design Field Trial	Establish an operational trial of the PCG system in a number of venues prior to state-wide rollout	Commission	3 months
Implementation	<ul style="list-style-type: none"> <li>• Oversee compliance of PCG state-wide rollout</li> <li>• Deliver training for staff</li> </ul>	Commission (training provider TBD)	Following successful field trial, approx. 4-6 months
Review of PCG operation	Evaluate effectiveness of PCG system and assess baseline data to inform any changes to limit settings	Commission	12 months after full operation

# Appendix B

## FRT IMPLEMENTATION STEPS

**Table 5 - Proposed implementation timeline**

Stage	Key steps	Responsibility	Timeframe
Government Announcement	<ul style="list-style-type: none"> <li>Respond to Commission’s recommendations</li> <li>Determine position on how costs will be funded</li> <li>Issue Ministerial Direction to Commission to implement the FRT framework</li> </ul>	Government	6 months
Legislative amendments	Introduce any changes if - required - to legislation and/or regulations (e.g. customer protections)	Government	6-9 months
Develop communication strategy	Advise stakeholders of proposed actions and timeframes for implementation including further intended consultation, monitoring and progress reports	Co.mmission	15-20 months from start of project to system development
System Design	<ul style="list-style-type: none"> <li>Review existing TGES database to develop system upgrade specifications (including API data exchange) and business requirements to improve control imaging and enable interfacing with FRT systems in venues;</li> <li>Develop individual FRT vendor system design</li> <li>Engage expert consultant to assist with system design (particularly FRT algorithm accuracy requirements)</li> </ul>	Commission (Government to approve outstanding policy issues)	
Establish regulatory framework	<ul style="list-style-type: none"> <li>Engage expert consultant to assist with technical standards</li> <li>Develop technical standard (and amend any other necessary Commission technical requirements as necessary) for the operation of FRT systems requiring venues use only FRT systems approved under that standard (to include compliance with data privacy and storage, security controls and system operational parameters)</li> </ul>	Commission (Government to approve outstanding policy issues)	

Stage	Key steps	Responsibility	Timeframe
	<ul style="list-style-type: none"> <li>• Establish legal requirements to ensure collection and storage of digital photos can be used by FRT systems.</li> <li>• Develop a customer protection policy including any authorisation for FRT systems to use the data (if required)</li> <li>• Develop operational guidelines for all gambling venues setting out requirements for installation and operation of FRT systems including equipment location; data storage and security; venue signage and reporting requirements;</li> <li>• Develop training module for venue staff on the use of the TGES database with the FRT system and responsible service of gambling</li> <li>• Amend TGES database user manuals</li> <li>• Prepare education resources for the public</li> </ul>		
TGES database upgrade and FRT providers	<ul style="list-style-type: none"> <li>• Conduct competitive tender process for TGES upgrade</li> <li>• Approval of FRT providers and the form of contract between these providers and prescribed licence holders</li> <li>• Approval of FRT equipment including a review of the current approved testers to ensure skills and capabilities of FRT systems exist</li> </ul>	Government Commission	
Staff training	Staff training commences	Commission	Ongoing
Design Field Trial	Establish an operational trial of the TGES database integration with FRT systems in a number of venues prior to state-wide rollout	Commission	2 months
Implementation	<ul style="list-style-type: none"> <li>• Oversee compliance of FRT implementation state-wide</li> <li>• Deliver training for staff</li> </ul>	Commission (training provider TBD)	Following successful field trial, approx. 4 months
Monitoring of FRT operation	Monitoring and compliance auditing of TGES database integration with FRT systems	Commission	Ongoing

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# Glossary

Term	Definition
Act	<i>Gaming Control Act 1993</i> (Tas), including any amendments as a result of the <i>Gaming Control Amendment (Future Gaming Market) Act 2021</i> and any regulations made under the Act. Tasmania's primary laws generally in respect of gaming and wagering, including the supervision and control of gaming machines.
API	Application Programming Interface – a standardised means for connecting computers and transmitting data between them
CCTV	Closed circuit television
Central EMS Host	The central point of an EMS which maintains communications with all venues, and collects and stores gaming machine financial and event data
Commission	Tasmanian Liquor and Gaming Commission - an independent body responsible for the regulation of gambling in Tasmania, established under the <i>Gaming Control Act 1993</i> .
EGM	Electronic Gaming Machine
EMS	Electronic Monitoring System operated by the Monitoring Operator
FRT	Facial Recognition Technology
FRT System	The combination of hardware and software elements incorporating FRT to generate alert messages and reporting
GCI	Gaming Consultants International
Interface device	An electronic component, typically installed within the cabinet of a gaming machine that interchanges information between a gaming machine communication port and a player card gaming application, and to manage data flow with attached peripherals such as a player card reader and a player display.
Liquor and Gaming Branch	The Department of Treasury and Finance, Liquor and Gaming Branch
LMO	Licensed Monitoring Operator
Loss	The amount of money a player has lost gambling during a given period. It is calculated as the total amount gambled (turnover) less the amount won by the player. Also referred to as expenditure or spend.
Monitoring Operator	The holder of a monitoring operator's licence under the Act
Player card	A card issued to a person upon registration with a player card gaming application
Player card data	Data stored on a player card that is read by, or transmitted to a player card gaming application
Player card gaming application	An activity or process related to gaming, whereby it is necessary to identify a specific person using a player card
Player card reader	A device attached to a point of gaming activity, or other service point where a player needs to be identified, which can read player card data from a player card

Player display	A display device at a gaming machine that may be a separate display screen (i.e. not the EGM screen), or is capable of causing external messages to be displayed on the EGM screen (e.g. a picture-in-picture capability). A player display may also incorporate a 'touch screen' overlay that allows the capture of player inputs.
Player gaming data	Data or information generated by a gaming device when used by a person with a player card
SEIS	2021 Social and Economic Impact Study of Gambling in Tasmania
TGES	Tasmanian Gambling Exclusion Scheme - a scheme that provides a means for people experiencing gambling problems to be excluded from gambling premises, or areas of premises, or from online gambling. An exclusion can be initiated by the individual or others
TITO	Ticket In-Ticket Out – a technology that allows for credit transfer from/to a gaming machine using a bar-coded ticket
Venue Operator	A person who is the holder of a licensed premises gaming licence, or a casino licence issued under the Act