Submission to the Royal Commission into the Casino Operator and Licence

30 June 2021

Disclosure

Trevor Callaway and Associates Pty Ltd (TCA), is a NSW based Australian company with a branch in Victoria that is preparing to commercialise its patented technology (known as GameSafe) that is specifically designed to minimise gambling harm when playing on poker machines, especially for problem gamblers, and to not affect non-problem gamblers.

Purpose of Submission

This submission is being made because TCA is convinced that this technology could be highly effective to address problem gambling and enable harm minimisation and therefore can assist Crown Melbourne to become a suitable person to hold a casino licence in Victoria and to operate more effectively in the public interest. This technology can facilitate high levels of compliance by Crown Melbourne in the management of problem gambling on poker machines and empower the regulator in its oversight capability and enforcement of compliance.

Terms of Reference

This submission addresses the following Terms of Reference.

E. If you consider that Crown Melbourne is not a suitable person, or that it is not in the public interest for Crown Melbourne to hold the casino licence in Victoria, what action (if any) would be required for Crown Melbourne to become a suitable person, or for it to be in the public interest for Crown Melbourne to continue to hold the casino licence in Victoria.

> This submission will describe practical and effective measures that can potentially be implemented in dealing with the inherent risk of harm from poker machines and that will assist Crown Melbourne to become a suitable person and to operate more effectively in the public interest.

K. Whether there are any other matters necessary to satisfactorily resolve the matters set out in paragraphs A to J, above.

> This submission will describe effective measures that can be implemented which will resolve many of the issues of harm from gambling on poker machines in the casino.

Background

Gambling harm from playing poker machines remains a large and intractable problem in Victoria despite the implementation over many years of a range of proactive and reactive measures including self-exclusion, pre-commitment, intervention, education, and support. Gambling harm minimisation has become one of the highest priorities of governments and regulators in relation to poker machines. It is one of the key problem areas for Crown Casino in meeting its obligations to holding its licence and is required to be addressed by this Royal Commission.

The inherent risk of harm from poker machines

The Victorian Responsible Gambling Foundation in its submission to the Royal Commission has pronounced: *"Terms such as 'responsible gambling' and 'problem gambler' put the primary responsibility for reducing and preventing harm from gambling on the individual, rather than on the regulation **and provision of gambling products that may carry an inherent risk of harm**."* (Our emphasis)[1]

The logical conclusion is that if a gambling product will inherently intervene to reduce and prevent gambling harm it will reverse this onus and transfer the primary responsibility for reducing gambling harm from the gambler to the regulators and operators of gambling products.

GameSafe is a technology that is specifically designed to provide an inherent protection against gambling harm from poker machines without affecting gambling from non-problem gamblers.

For further details of the GameSafe technology when mentioned in this submission please refer to the GameSafe Information Sheet in the Appendix**.**

Proactive Measures to Reduce Gambling Harm

Exclusion Schemes

In jurisdictions throughout Australia various forms of exclusion schemes are being implemented. These include self-exclusion, venue operator exclusion and 3rd party-exclusion.

In Victoria self-exclusion is the only form being implemented.

In the Alliance for Gambling Reform's submission to the Royal Commission it describes self-exclusion as applied in the casino as *" ... the onus (and penalty) is placed on the individual rather than the operator serving and profiteering from a dangerous and harmful product is shameful and must urgently be addressed"*. [2]

While Crown Casino may very well have its own means of operating self-exclusion, elsewhere throughout Victoria and Australia all exclusion schemes are largely ineffective in achieving a significant overall reduction in gambling harm.

Most recent attention is being given to the levels of compliance by individuals on the exclusion registers and how venues can enforce compliance. Measures include facial recognition and cashless gambling cards.

While stricter enforcement of compliance will achieve protection from harm for those on the exclusion registers, it cannot make any impact at all on the gambling harm suffered by individuals that are not on the registers.

Academic studies on the uptake of self-exclusion schemes taken overall have found that *"It is not possible to indicate the current levels of SE program usage. It is most likely that uptake rates are low."*[3] Unfortunately, it must be concluded that most problem gamblers cannot be captured by exclusion schemes. Also, unfortunately, gamblers rarely will reach the status of exclusion until they (and their families and loved ones) have already suffered considerable gambling harm over a long period of time.

Gambling harm is massive and widely prevalent and will remain so despite exclusion schemes at whatever their level of compliance.

TCA is of the view that properly implemented exclusion schemes are a valuable and essential means of helping those who have been identified as problem gamblers. However much more effective and reliable means are essential for rapidly identifying problem gamblers and having them referred or recommended to exclusion schemes.

Ideally, gambling products that can inherently control gambling harm will prevent gamblers from progressing to the humiliation and stigma of being on an exclusion register.

GameSafe technology inherently controls compulsive gambling by empowering gamblers through real time awareness of their compulsive gambling behaviour and by intervening to limit their losses. This will prevent many gamblers from progressing to exclusion schemes or continuing to gamble in denial of their problem.

Pre-commitment

The YourPlay system which is deployed throughout Victorian gambling venues including the casino provides a system whereby the gambler can pre-commit to a loss target on poker machines and receive messages on gambling losses. Unfortunately, as currently implemented YourPlay has been found to be quite ineffective in reducing gambling harm[4] because.

- YourPlay is voluntary and is used only by 0.01% of gamblers.
- The gambler can decide to ignore the target once reached.
- In the casino it is primarily used to unlock unrestricted play and facilitates gamblers to make massive losses rather than assist them to limit their losses[5].

TCA is of the view that YourPlay could be a highly effective system if its functionality were enhanced to intervene and actively assist problem gamblers and to provide the capability to manage the extent and prevalence of problem gambling on poker machines.

This could be achieved by integrating YourPlay with GameSafe and combining their pop-up messages to the gambler.   YourPlay's messages on gambling time spent and losses would work synergistically with GameSafe's alerts, warnings, and betting limits management on compulsive gambling behaviour to assist the gambler in controlling their own gambling.

Moreover, the data from GameSafe to the YourPlay servers would enable the authorities to accurately analyse the nature and extent of problem gambling on the YourPlay network and monitor compliance by the casino on required interventions.   The data from GameSafe would also be an invaluable resource for independent researchers.

Intervention

Higher levels of intervention by the casino operator are proposed in submissions from the Victorian Responsible Gambling Foundation and the Alliance for Gambling Reform and others.

Measures proposed include increased levels of independently trained staff to monitor gamblers for observable signs of problem gambling and using data analytics to inform staff about factors such as gambling spend and time of continuous play.

Regarding gambler observations, academic researchers have found that "*Observation of such behaviours is, in any event, most likely to occur at a point where individuals will have experienced significant harm. It is at best a harm minimisation activity, and not a harm prevention intervention.*" And furthermore conclude that "*Observation of gamblers by staff is unlikely to provide conclusive evidence of harmful behaviour unless supported by data monitoring systems and algorithms capable of identifying emerging patterns. Both terrestrial and online systems should facilitate such systems, …*"[6]

The Australasian Gambling Council's submission reports that technological systems "… *are largely seen as an adjunct to staff observation and act as a complementary tool to staff engagement efforts with players.*" …

but … "*There are distinct challenges in establishing predictive algorithmic monitoring systems (in terms of ensuring system accuracy and transparency). …*"

and resolved that…
Nevertheless, in large casinos, such technologies represent a potentially valuable means of narrowing the pool of consumers with whom staff should interact from a responsible gambling perspective. [7]

TCA concurs with these findings in the above but would like it especially noted that using subjective observable signs to detect problem gambling is largely ineffective until gamblers have experienced significant harm. It should also be noted that none of the complementary technologies available can specifically detect compulsive gambling in real time on poker machines. As such, a reliance on observable signs and existing technologies is not robust and therefore insufficient for detecting problem gambling accurately and promptly.

Moreover, these interventions lack transparency to the gambler. Alarmingly, any gambler identified by these subjective technologies would probably not be aware of their potential gambling risk behaviour until approached by intervention staff.

GameSafe technology would provide a major augmentation to intervention effectiveness as it rapidly identifies compulsive gambling and dynamically notifies gamblers about their compulsive gambling behaviour. It also can dynamically notify the casino operator about the occurrence of problem gambling behaviour in real time to enhance the responsiveness of intervention staff.

Best Practice

One of the questions posed by the Counsel Assisting the Commission was "*is Crown properly delivering upon its commitments to the Responsible Service of Gaming?*"[8] Or, in other words, is Crown Melbourne adhering to acceptable levels of "Best Practice"?

The issue of "Best Practice" regarding the management of responsible gambling is discussed in the submissions by the Australasian Gaming Council (AGC) and the Victorian Responsible Gambling Foundation (VRGF).

According to the AGC:
AGC members subscribe to a belief that "to achieve their principal aim, harm-minimisation strategies should be based on empirical evidence demonstrating their effectiveness in achieving their intended objectives for targeted individuals". [9]

According to the VRGF:

"There is no settled research about 'best practice' to reduce problem gambling or gambling harm that is specific to casinos. However, research shows that regulating access to gambling products and their operational features is the most effective way of reducing harms from gambling at a population level." [10]

TCA is of the view that Crown Melbourne should take a leading role in the development of standards of "Best Practice" and proactively respond to changes in community expectations and the capabilities of new technologies that can minimise gambling harm in the casino.

Recommendations

1. **That as a condition of retaining its licence the Royal Commission recommend that Crown Melbourne investigate and implement effective new technologies such as GameSafe that can overcome the inherent risk of gambling harm on poker machines.**

2. **That the Royal Commission recommend that the regulator investigate the integration of technologies such as GameSafe with YourPlay that will significantly increase the effectiveness of YourPlay to help gamblers to control their gambling and to enforce strict compliance by the casino in the responsible management of problem gambling.**

References

1. Victorian Responsible Gambling Foundation, *Submission to the Royal Commission into the casino operator and licence. 31 May 2021*. p4
2. Alliance for Gambling Reform, *Inquiry into the suitability of Crown Melbourne Limited to hold a casino licence*. 31 May 2021. p16
3. Livingstone, C, Rintoul, A, de Lacy-Vawdon, C, Borland, R, Dietze, P, Jenkinson, R, Livingston, M, Room, R, Smith, B, Stoove, M, Winter, R & Hill, P, *Identifying effective policy interventions to prevent gambling-related harm*, *June 2019.* p33. Victorian Responsible Gambling Foundation
4. South Australian Centre for Economic Studies, *Evaluation of YourPlay, Final Report,* Victorian Department of Justice and Community Safety, 2019
5. Livingstone, C, Rintoul, A, de Lacy-Vawdon, C, Borland, R, Dietze, P, Jenkinson, R, Livingston, M, Room, R, Smith, B, Stoove, M, Winter, R & Hill, P, *Identifying effective policy interventions to prevent gambling-related harm*, *June 2019.* pp114,115. Victorian Responsible Gambling Foundation
6. Alliance for Gambling Reform, *Inquiry into the suitability of Crown Melbourne Limited to hold a casino licence*. 31 May 2021. p11
7. Australasian Gaming Council, *Submission to the Royal Commission into the Casino Operator and Licence, 31 May 2021*. p33
8. Finanzio, A., Counsel Assisting the Commission. *In the matter of a Royal Commission into the casino operator and licence*, Transcript of Proceedings, 10.00 am, 1 June 2021.
9. Australasian Gaming Council, *Submission to the Royal Commission into the Casino Operator and Licence, 31 May 2021.* p30
10. Victorian Responsible Gambling Foundation, *Submission to the Royal Commission into the casino operator and licence. 31 May 2021*. p9

Appendix

GameSafe Information Sheet

Purpose of technology. GameSafe has the specific purpose of minimising gambling harm from Electronic Gaming Machines (EGMs - also known as poker machines) by making them inherently safe for compulsive gamblers without affecting gambling by non-problem gamblers.

Description of GameSafe. GameSafe consists of a device installed in each EGM together with a tethered biometric wristband. GameSafe devices have been pre-trained to detect various levels of compulsive gambling and programmed to automatically carry out interventions with the poker machine including messages and alerts to the gambler and to control the level of gambling on the poker machine.

Patents. Full 25-year patents held by Trevor Callaway and Associates Pty Ltd (TCA) in USA, Australia, and Canada

Trademarks. GAMESAFE is a registered trademark of TCA.

Fields of technology. Operates in the fields of artificial intelligence, neural networks, machine learning, and biometrics.

Development team expertise. Technology development using pure mathematicians, engineers with extensive expertise in neural networks, machine learning and artificial intelligence, software engineers, EGM engineers, and electronic device designers.

Features and Capabilities of GameSafe

Gamblers must wear the biometric wristband to activate GameSafe.

If the gambler chooses not to wear the wristband the poker machine operates normally but at the "safe" level prescribed by the regulator.

GameSafe rapidly detects:
- Compulsive gambling intensity.
- Dangerous "zone" gambling.
- Poker machine jamming with picks.

GameSafe automatically and dynamically intervenes with the poker machine and gambler activating:
- On-screen pop-up messages.
- Vibration alerts on the biometric wristband.
- Progressive reduction of bet limits to the prescribed "safe" level.
- Suspension of play.

GameSafe is anonymous and private unless networked:
- The Gamesafe device is in each poker machine and can operate autonomously without networking or centralised monitoring and control.

GameSafe can be integrated into networks for enhanced monitoring and control:
- GameSafe can be integrated with systems such as YourPlay and the networks of the venue operator.
- If networked to the operator, GameSafe can provide real time alerts to intervention staff on the occurrence of compulsive gambling.
- If networked centrally and remotely such as with YourPlay, GameSafe can provide a stream of logged data to the regulator on the occurrences of compulsive gambling in the casino that will enable the enforcement of compliance.
- It will also enable the regulator to track aggregated levels of compulsive gambling across the network and facilitate high levels of responsible gambling management.

Suggested Mode of Operation

- All poker machines in a venue are set to operate normally at a default "safe" betting level as prescribed by the regulator.
- To access higher bet levels (e.g., $5, $10, $20, etc.) as prescribed by the regulator, the gambler must wear the biometric wristband tethered to the poker machine which then automatically activates the GameSafe device within each poker machine.
- Non problem gamblers play normally at the higher betting levels without intervention by GameSafe. Regulators may consider higher bet levels for non-problem gamblers to offset reduced revenues from problem gamblers.
- Compulsive gamblers are rapidly detected by GameSafe whereupon GameSafe automatically intervenes by sending alerts and messages to the gambler about their compulsive behaviour and progressively lowering the betting level on the EGM to the default level or even to suspend play.

Current Status.   Operating as a Proof-Of-Concept demonstration device in the showroom of an EGM manufacturer in NSW.

Next Steps to Implementation. Complete training of the device using a statistically representative number of gamblers with a range of assessed levels of problem gambling severity. Complete product design for manufacture and commercial release. Conduct trials in licensed gambling venues. Full scale rollout.