

**GAMBLING REFORM SUBMISSION**

**by:**

**SCIENTIFIC & TECHNOLOGY INNOVATIONS**

**For the**

**Joint Select Committee  
on Gambling Reform**

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## 1. Submission Summary

In the acknowledgment to the Australian Federal Governments' Joint Select Committee on Gambling Reform and with the growing concern over problem gambling and especially in relation to poker machines, Scientific & Technology Innovations [S&TI] have decided to become involved in this social problem by producing a controlling system that will effectively eliminate poker machine problem gamblers as well as adapted technology for other forms of this problem. This Submission can be served as a guide to this pending innovation in the proof that our efforts to date are substantial and should not be overlooked in this serious issue of Problem Gambling on Poker Machines and similar technologies.

There was a need to consult with medical professionals whom specialise in this area of problem gambling. Poker machine problem gambling technology to date has advanced to a precommitment card, however this form of problem gambling can allow the problem gambler to get around the mechanics of this precommitment card system.

All research suggests a range of difficulties concerning the current technologies that do not prevent problem gambling on poker machines as well as on line poker machines. S&TI. have devised a controlling system for 'stand alone' poker machines called Poker Machine Abuse Alerting System or: PMAAS. and has the ability to provide solutions to this on going problem gambling problem.

Although not tested in a Clinical Trialled environment to date, PMAAS. has been demonstrated to the medical specialists in the problem gambling field with a good report back to S&TI. about the worthiness of PMAAS. Further evaluations using a Clinical Trial methodology have been recommended by the medical specialists as the type of problem gambler varies as with aspects at the gaming venue, eg. type of machines, displays, limit denominations and the roaming from machine to machine by the problem gambler.

This Submission has been produced to confirm that PMAAS. has a place in the Gaming Industry as a suitable problem gambling system for use in Australia and Internationally. Information provided with this Submission will significantly 'clear up' any misconceptions about any doubt to the usage of PMAAS.

The Gaming Industry along with all Clubs and Hotels will require to be informed about the benefits of PMAAS. to their particular business/es. At the present time there is quite a major concern from operators in the Industry in any changes to poker machines in a rather 'negative view' due to the constant concerns about the problem gamblers and poker machines. A PMAAS. awareness program needs to be presented to all members of the Gaming Industry so that its use at all gaming venues is understood.

As for the financial aspects of PMAAS., it is envisaged that as at 2010, the cost of one [1] PMAAS. unit will be costed at around \$500.-\$600. range [+ gst.] and only when the systems are in production of at least 5000 systems per run of manufacturing, plus a low cost monitoring back to base fee [50 clubs/hotels or more]. Research for PMAAS. has been undertaken for over two [2] years as there has been much consultation with the responsible gaming counselors and expert problem gambling medical specialists.

For example a device was presented to Central Coast Problem Gambling Service [CCPGS] back in 2008. The device measured the frequency of notes as they were inputted into the poker machine and if the frequency was too high, the device then called a 'money slot controller' would close the note input slot to the poker machine therefore preventing the input of any further notes preventing play on the poker machine.

Research has proven that this form of problem gambling control mechanism failed to prevent problem gambling due to the nature of the problem gambler. For example the problem gambler would simply move to another poker machine and continue problem gambling and not allowing a non problem gambler [a recreational gambler] to use the poker machine that has been locked out for a predetermined period of time.

## 2. PMAAS. Operation Summary

PMAAS. is a stand alone device that is placed close to the poker machine and powered from a mains ac adapter. The sensing element is positioned at the bottom of the poker machine display unit, on the inside of the LCD. or blind style of Game Blanking Out Screen/s [GBOS]. The GBOS. will be provided for the Clinical Trial and at present there are a line of 5 white LEDs that shine towards the player as a deterrent indicating that an abuse alarm has been triggered.

In the event of an alarm from PMAAS., a single white LED. shines towards the player together with an audio warning message that will warn the player to have a break from play. There are three [3] stages of warning alarm messages before the PMAAS. system blanks out the poker machine display [normally].

Upon arriving at the third alarm warning, the video monitoring system is triggered and will record the actual player in the gaming area. The monitoring station will watch where the player roams to and make a decision as to if another poker machine display is to be blanked out or not. This is achieved by way of radio remote control from the monitoring station.

PMAAS. Datalogs alarms on all poker machines for record and research purposes whereby these records can be emailed to Government and medical experts for further action or not concerning problem gambling.

PMAAS. Can be programmed easily to suit the necessary limits for denominations for each poker machine and if the limits are exceeded within a time frame as set down from research then the alarm process begins to cycle as previously mentioned.

As a player progresses with the gambling on the poker machine a small LCD. counter on PMAAS. accumulates game numbers so that both staff and the player can make observations as to the number of games that the player has made. Since the laws for NSW. requires that all poker machines have to return 85% of 1 million games, then a percentage of these returns have to be given back to the player.

For example if the player has put 2000 x \$1. games [for \$1. denomination] through the poker machine, then the refund due back to the player [at that desired exit point] will be due a refund of:  $2e-3 \times 2000 \times .85 = \$3.40$ . for the refund, a log of this refund should be kept at the gaming venue.

The LCD. games counter for all poker machines is able to be reset by way of an infra red remote control at any PMAAS. based monitoring system. This can also be accomplished via the monitoring station if management at the Club and/or Hotel do not wish to reset the LCD.

The PMAAS. system will automatically reset 'poker machine abuse buildup' when the poker machine has been left to pause for a time as determined by research. This means that for any warning alarms the player may take a break from the poker machine and give the 'game thrill sensation' a pause which will also aid in the player not to become addicted to the poker machine 'gambling cycle'.

With normal recreational gaming and PMAAS. monitoring, the player will have no problem in having a gamble on any poker machine and that no warning messages will commence and deter any poker machine player under these circumstances.

Having PMAAS. at the venue, will allow the range of gaming machines to be enlarged for an increase of Club/Hotel revenue without the harmful effects that would otherwise possibly damage players from excessive gaming that can lead to harmful psychological damage and associated economic problems.

### **3. PMAAS. and Accepted Research from Problem Gambling, the Facts.**

- 3.1. PMAAS. can drastically reduce or eliminate adverse health, emotional problems as well as financial impacts by interrupting the pattern of compulsive playing and intervening in the Problem Gambling Cycle.
- 3.2. PMAAS. can reduce the risk of playing poker machines too frequently versus other forms of gambling such as lotteries, scratchies etc.
- 3.3. PMAAS. aims to drastically reduce or eliminate levels of 0.5% to 1% of the 160,000 severely rated problem gamblers.
- 3.4. PMAAS. aims to drastically reduce or eliminate problem gambling spending of ~40% of the total gaming machine spending as well as boost recreational non harmful gaming on poker machines.
- 3.5 PMAAS. can provide further benefit to local communities by increasing poker machine usage in a non harmful way.
- 3.6 PMAAS. can provide higher returns back to Clubs & Hotels as the tax revenue could be lowered by using PMAAS.
- 3.7. PMAAS. can break the problem gambling cycle and even help rehabilitate those people experiencing problems.
- 3.8. PMAAS. is able to provide a data log of poker machine activity and provide feedback to Government and/or approved private research agencies.
- 3.9. PMAAS. has a warning message on the control unit along with the pre recorded audio messages that warn a player that gaming limits have been reached.
- 3.10. PMAAS. displays the game number so that a player and/or staff member can check gaming progress with refund calculation for any refund that is available.
- 3.11. The promotion of the PMAAS. system to be included in the promotion of the poker machine venues to inform consumers of a safe gaming environment.
- 3.12. PMAAS. needs no precommitment strategy and since PMAAS. incorporates video monitoring, players can be discretely warned or screened out from playing for a predetermined time period. Fraud against PMAAS. is very difficult using PMAAS. as there is even an alarm that will sound if the detection sensor is interfered with.
- 3.13 Where a problem gambler arrives back to the venue and is detected at message warning 1, there will be ability to change the message and asks the player to leave the gaming venue area or the display will be blanked out on that player.
- 3.14 PMAAS has limits for each poker machine denomination so as to not interfere with recreational gamblers, whom usually bet at low levels. Research suggests that time spent playing is more the issue with Problem Gambling. Also, 'High Rollers' usually walk away sooner from the poker machines than a Problem Gambler would.
- 3.15 PMAAS. restricts amount of games in a set time in respect to the denomination amount so that will effectively restrict the dollar entry amount, yet still allowing the recreational gambler enjoyment to play safely.

### 3. PMAAS. and Accepted Research from Problem Gambling, the Facts continued...

3.16 If an alarm warning sounds [at level 3], a free non alcoholic beverage may be offered [message from PMAAS.] to the player so to resist in any build up of a possible problem gambling cycle.

3.17. If a problem gambler roams from machine to machine activating warning level 1, the monitoring service will monitor this person and blank out subsequent poker machines if the person tries to continue possible problem gambling.

3.18. Having a PMAAS. equipped poker machine may allow [via new legislation] the gaming venue to remain open longer than 2am.in all States and Territories.

3.19. PMAAS. is totally independent for its operation and stands 'passively' near any poker machine, protecting the player from any form of problem gambling

3.20. PMAAS. has the ability to refund money on the basis that a percentage of play being 85% of 1e6 games and is above \$1. for the game that was played [NSW gaming laws].

The LCD display cannot be manipulated in any way and can be reset [not incremented] by local infra red controller or by the monitoring station.

The authorised staff member at the venue may use the IR. controller to reset games and provide a refund to the player or else the PMAAS. system will automatically reset both the LCD counter and internal alarm build up counter if the poker machine has not been used for a time period of [subject to research].

### 4. PMAAS Questions & Answers

1.

**Q. Will PMAAS. Really solve the problem gambling problem for Poker Machines?**

A. Yes, even at this early stage of the device's development there are good signs that PMAAS will solve the problem using poker machine behaviour discrimination via high game usage in combination with limits and digital warnings up to a final control device that can block the poker machine screen all without even touching the poker machine itself.

2.

**Q. Won't poker machine manufacturers complain and launch legal action against the use of PMAAS in their domain?**

A. No, the PMAAS. will actually remove all problem gamblers that continue to behave in this fashion and allow for a much 'cleaner reputation' for all poker machines as well as even enable more poker machines into the market place.

3.

**Q. Are you confident that PMAAS. will be accepted by Government here in Australia and Overseas?**

A. Yes, provided that the benefits from the use with PMAAS. at gaming venues have really stopped problem gambling and the true answer is the results from the pending clinical trials so that the evidence will be conclusive and Governments everywhere may begin to implement a PMAAS. strategy.

4.

**Q. Will PMAAS. be easy to install and use?**

A. Yes, most certainly since PMAAS. is simply placed near the poker machine and anchored to either a floor, wall or ceiling mount. To use PMAAS., just plug into the ac. adapter, switch on, by a small 'key' then allow PMAAS. to function automatically via the monitoring station.

**Q4. Will PMAAS. be easy to install and use continued...**

Note. If a poker machine player requires a refund, then staff will be called to the machine however given the very low returns from the refund calculation many games will need to be played and without causing alarms to trigger.

5.

**Q. What if PMAAS. is interfered with by a poker machine player?**

A. A white LED. commences to blink that will alert both staff [visually] and the monitoring station video system will record whom has sent the alarm off and render action as the manager of operations at the station sees fit to or not.

6.

**Q. Is PMAAS. expected to be cost effective for Clubs and Hotels?**

A. Yes. The cost of this system will be less than \$600. [+gst. In runs of 5000] and the fully staffed monitoring station will be very inexpensive [less than \$4,000. per year, across min 100 venues].

7.

**Q. Can PMAAS. break the problem gambling cycle?**

A. Yes most certainly, well before a regular gambler could even imagine entering into a problem gambling episode, PMAAS. will automatically intervene with this style of behaviour and control a gambler well before the cycle of problem gambling takes hold on the gambler.

**5. Opinion**

The Poker Machine Abuse Alerting System or PMAAS. is still in a development phase and will very soon require a Clinical Trial. The timing due date for the Submissions for the Joint Select Committee on Gambling Reform has been set down for 31 January 2011. The Clinical Trial for the PMAAS. system may not be over until April-May 2011.

At this stage it is too early to be able to be sure of a successful outcome of the Clinical Trial even though comments in this submission may tend to differ with this statement as a result of rigorous PMAAS. testing to date.

Scientific & Technology Innovations will be able to update the Inquiry into this matter as progress is being made with further development, Clinical Trials and design changes as a result of the research & development of PMAAS.

The Central Coast Problem Gambling Service [CCPGS] is of the opinion that the Preventative Quality of PMAAS. is the real beauty of the innovation in that it acts right when is needed to when the problem starts to immerge.

Proven research says, "self control may be more difficult to learn than an accurate appreciation of the true nature of gambling, preventative measures for gambling problems may be more successful...." and "since the amount of money lost by players is the immediate cause of gambling problems, any modification that reduces

## **5. Opinion continued...**

the loss of money has the potential to curb the level of gambling problems caused by excessive poker machine play.” (Blaszczynski, Sharpe, Walker 2001).

CCPGS. also say that early intervention and harm minimisation are the 'buzz' words in addiction treatment.

### **Opinion References:**

1. Central Coast Problem Gambling Service
2. Scientific & Technology Innovations
3. Blaszczynski, Sharpe & Walker are from “Assessment of the impact of the Reconfiguration on Electronic Gaming Machines as harm minimisation strategies for Problem Gambling” - A report for Gaming Industry Operators Group. University of Sydney Gambling Research Unit, November 2001.

## **6. Problem Gambling Case Study**

Betty's story is typical of someone in treatment for poker machine addiction and her behaviour pattern is classic of the “Problem Gambling Cycle”. The following illustrates how the pattern problem gambling behaviour unfolds.

### **6.1 The Desire to escape or win**

Betty gambles to escape stress and anxiety and to experience something positive. Her tension is eased and she becomes energised for a time while she is gambling. The random payouts of the poker machine and the occasional win lift her excitement levels and raise her sense of self-esteem. The desire to win is a powerful force in maintaining her gambling problem. It's not so much the money from the win that keeps her playing but the intense euphoria she experiences. The need to relive these emotions is the basis of her addiction – one win is never enough so she reinvests money in hope for more euphoria.

Betty also experiences a sense of dissociation while playing. She talks about how the visual and auditory features of the machine “entrance” her. She loses all track of time in this state that she call “in the zone” and she often has no recollection of repeated withdrawals from the ATM.

### **6.2 Losing and chasing**

When the inevitable happens and she loses her money, Betty becomes desperate and begins to panic. This is when things get out of hand. The uncertainty of the next win combines with past winning memories. Her anxiety becomes high and her thinking irrational, her need for euphoric emotions increases so she re-invests her money and gambles more in hope to win back her loses.

### **6.3 Emotional and financial crisis**

When Betty has exhausted all of her funds she is left with no money to live on and no way to pay debts. She leaves the venue feeling great remorse and self-contempt. She promises she'll never gamble again.

## 6. Problem Gambling Case Study continued...

### 6.4 Back to the desire to escape and win

The stress and financial pressure that this has created is endured for a period - while the sense of remorse continues. Eventually though, the need to escape the stress grows and memories of past wins on poker machines and the excitement the memories hold mounts and becomes stronger. The urge to play for Betty becomes so strong it override any sense of remorse and she returns to the gaming venue.

### 6.5 How the PMAAS can intervene in Betty's Problem Gambling

The progressive alert levels of the PMAAS firstly; informs the player when they begin showing signs of problem gambling behaviour, secondly; it gives another warning when these signs continue or increase, and then finally; it blanks out the poker machine display before harm can be done.

“Since the amount of money lost by players is the immediate cause of gambling problems, any modification that reduces the loss of money has the potential to curb the level of gambling problems caused by excessive poker machine play.” (Blaszczynski, Sharpe, Walker 2001)

The PMAAS intervenes only when it is required and at a crucial point in time – when play is getting out of hand. In Betty's case, (as with all other gaming machine addicts), the Problem Gambling Cycle is intercepted by making her aware of her risky behaviour as it occurs, if her urges override and she continues with her compulsion the machine is automatically reported with the poker machine display being blanked out.

The interception of the PMAAS at the beginning of the Losing and Chasing stage of the Problem Gambling Cycle, (when things start get out of hand), can result in 3 possible outcomes: over a period of time Betty may learn the how to modify her behaviour in a way that is safe to continue playing, if not the PMAAS. will intervene each time she does play, or Betty may choose to cease playing altogether. Either way, the PMAAS. acts as both a mechanism for prevention and harm minimisation in problem gaming machine playing.

## 7. Reference Notes from Research

“Since self-control may be more difficult to learn than an accurate appreciation of the true nature of gambling, preventative measures for gambling problems may be more successful...” (Blaszczynski, Sharpe, Walker. 2001).

Optimal harm minimisation strategies need to:

- a. Protect participants from developing gambling problems
- b. Reduce problems for the gambler
- c. Have little impact on the enjoyment or play rates for recreational gamblers
- d. Have an impact on revenue that is sustainable for the gaming industry

## 7. Reference Notes from Research continued...

- e. Have no unforeseen or unintended negative consequences

(Allcock 2002)

The large majority of people in Australia gamble in one way or another at some time in the course of a year (Productivity Commission, 1999.)

Griffith (2001) speculated that advances in electronic gaming machines has escalated the risk of their addictive properties.

It is also important to note that venue staff should not see their role as being to 'diagnose' problem gambling. This would be inappropriate and outside their role and expertise. (Tim McCorrison CURRENT ISSUES RELATED TO IDENTIFYING THE PROBLEM GAMBLER IN THE GAMBLING VENUE, 2002)

The safest conclusion that may be drawn from all observable aspects of gaming machine play is...not to be absolutely sure that the player is a problem gambler. (Clive Allcock, CURRENT ISSUES RELATED TO IDENTIFYING THE PROBLEM GAMBLER IN THE GAMBLING VENUE, 2002)

## 8. Primary References:

1. Scientific & Technology Innovations [Gosford, Newcastle and Hornsby, NSW. Australia]
2. Central Coast Problem Gambling Service [CCPGS. Woy Woy, NSW. Australia]
3. Professor Alexander Blaszczynski [University of Sydney, Australia]
4. Dr. Clive Allcock [Hornsby Hospital NSW., Australia]

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