

TECHNOLOGIES FOR THE REGULATION OF ONLINE GAMBLING

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Any jackass can kick down a barn, but it takes a good carpenter to build one. Sam Rayburn.

INTRODUCTION

Whilst there are those who would seek to kick down internet gambling, the Australian state and territory governments are seeking to build a well regulated internet gambling market to attract businesses serious about their credibility and consumer protection, and offer the global player a trusted alternative to non-Australian sites.

A corollary to the above quote might be...*and with building comes order, with destruction, chaos.* To attempt to prohibit a global product that defies regulatory borders in a world where there is little to suggest national, let alone global cooperation, can only result in an unordered, poorly regulated industry that might present a danger to the average consumer or be used to support the laundering of illicit funds. Transnational corporations no longer need to be located in a domestic market or have the approval of the domestic authorities to service that market. They can be represented by a computer application located anywhere on the planet, at any given time. They have the power to choose where to be regulated, if at all. **Technology is driving policy and regulation**, "human progress is now linked to electronic progress and this synergy is beyond human control." [1]

John Perry Barlow of the Electronic Frontiers Foundation warned in 1995 that we were in danger of getting "...Government by the clueless, over a place they've never been, using means they don't possess".

I suggest that the new world order that e-commerce presents, forces a change in the regulatory paradigm where **regulation is no longer a sovereign right of governments, but rather a marketing option, based on a voluntary business decision that regulation as a facilitator of trust will create barriers to entry and marketshare.**

Australia must accept this reality and act on it or be left behind in the race to establish as a major player in the global e-economy.

This paper will consider the Australian regulatory approach to managed liberalisation of E-Commerce Gambling. Specifically, the various technological controls that exist to ensure fairness, security, privacy, and auditability of Internet Gaming sites.

CONTEXT

If we break “Internet gambling” down into its smallest elements, being “internet” and “gambling”, it is suggested there are no obstacles in regulating gambling, the activity.

The obstacles are solely in regulating the Internet, and I see the major impediments as defined below:

Definition - The Internet has, so to speak, been built “by the people for the people”. It is democratic, unstructured, and dynamic in nature.

Jurisdiction - A person anywhere in the world can transact with a site anywhere else in the world. The customer, the provider, the financier, and transactions may have instances in different jurisdictions. Jan James [10], suggests that the question of residency is a major issue in determining jurisdiction. He suggests that, “The residency of individuals won't change because of the use of electronic business methods”, but goes on to suggest that determining the residency of non-natural persons such as companies is difficult. The question of is a company a resident where it (a) has its servers located, (b) where it is incorporated, (c) where the management decisions is raised? This question is further complicated insofar as the identifying the location where a business decision is made given conference calls, e-mail and virtual meetings. So how does a regulator reasonably regulate (and enforce the regulation of) something outside of that regulator's jurisdiction? Perhaps only through international cooperation?

Government Division and Industry Unification - Politicians, governments and law enforcement at state and federal levels experience difficulty cooperating amongst themselves on policy let alone on an international basis. Apart from policy there is also the matter of priority as Feather points out, “differences in jurisdictional priorities will be the most crucial factor in terms of effectively addressing cybercrimes” [7]. Meanwhile, The Electronic Frontiers Foundation presents a globally united front against what they consider are the “irrational and unnecessary laws” governing the Internet. The Blue Ribbon Campaign is the international movement promoting free speech on the Internet and it is perhaps only a matter of time before significant international “user” and provider associations begin to unify toward self-regulation, “public legislature can be replaced by an unelected group of digital custodians” [4].

Privacy - Given the use of encryption, anonymisers, and other readily available tools, if the regulator is oblivious to what is data is being imported and exported, how do they know if the law is being broken?

Technology Evolution - The reality is that the industry is driving the technology and the technology is driving the government. Governments are bound to being reactive rather than proactive in defining controls, and may increasingly become the “slaves” to large corporations as

trust (the essential e-commerce facilitator) is established through "brand names" and not regulation.

Nicholas Negroponte states that, "national law has no place in cyberlaw" [2]. L. Gibbons considers that "Because of the fractal nature of the Internet, existing regulatory and economic models established for other technologies are inapplicable to cyberspace" [3]. Tim May, a physicist who retired wealthy from Intel at 34 to lead a new generation of cypherpunks dedicated to individual liberty describes national borders as not even "speed bumps on the information superhighway" [5].

The activity, gambling, can be regulated and Australia has the best reputation in the world for well regulated gambling. The medium on which the activity takes place cannot be regulated with any semblance of efficacy. Accordingly, regulation of the activity becomes voluntary on a medium without borders.

CROSSROADS

It is a widely held view that e-commerce gambling is not viable without "trust". Trust facilitated through security, privacy, etc. I feel we are at a crossroads at this point in time: **Trust through regulation and brandnames (sovereign government) or through brandnames and longer-term market acceptance (industry self-government) alone.**

We have large corporations who have established global brand names (both within and external to the gambling industry, often in the wider entertainment industry). There is an inherent global market acceptance and trust associated with those brand names. These corporations invariably have substantial investments in "terrestrial" (land-based) businesses and hold existing licences which they can ill-afford to expose. Accordingly, such corporations are currently not willing to expose their brands and businesses by establishing operations in jurisdictions of questionable credibility.

At this time there are few viable and credible markets within which to base the "big brand" internet gambling operations. Indeed, Australia effectively offers the only viable option at this time and with this offering is well positioned to establish trust through regulation as "brand-names" volunteer to submit to regulation. Such an alliance would establish an international benchmark by which the global internet gambling industry will be judged. Most likely through sheer market size, the current "illegals" would either need to raise their standards to include player protection, anti-money laundering and other provisions or go out of business or continue in tax-havens as a front for the laundering of the proceeds of transnational crime.

The other path is that due to reasons of domestic politics or foreign trade pressures, Australia freezes progress or attempts to enforce a ban. This would serve no other purpose than to expedite both the loss of a significant export market off-shore, and dilute the current appeal of "voluntary regulation" as trust through industry self-regulation and "brand-names" are established and governments loose control of any compliance agenda. Attempted prohibition does nothing to protect consumers.

PROHIBITION CONSIDERATIONS

CONTENT FILTERING

In July 1999 the Australian Government amended the Broadcasting Services Act to cover regulation of Content that is delivered over the Internet.

"Under the amended Broadcasting Services Act, from 1st January 2000 any person will be able to complain to the Australian Broadcasting Authority (ABA) about online content. If the ABA agrees that the material is potentially prohibited content, and the content is hosted in Australia, then the Internet content hosting (ICH) organisation is issued with a takedown notice¹. For overseas hosted content, which is expected to involve the majority of complaints, ISPs should put in place procedures to deal with the content" [6].

In December of 1999, the CSIRO prepared a paper for the National Office for the Information Economy titled: "Access Prevention Techniques for Internet Content Filtering". The report investigated inclusion and exclusion filtering, keyword filtering, packet filtering (look at IP address), URL filtering(address), profile filtering(characteristics of content), Image analysis filtering (e.g. detection of skin tones), filtering at the ISP and the client.

The report concluded as follows: "There is no single, 'good' technology that could be adopted by all ISPs to filter Internet content. The best choice for any particular ISP would depend on many factors... " [6].

To implement effective content filtering will be at a significant cost in terms of ISP performance and stability. By impeding the ISPs one impedes all users of that ISP, and hence the internet and e-commerce generally. **Prohibition through filtering is simply not viable if Australia is to compete in e-commerce in the global economy.**

FINANCIAL INSTITUTIONS

To gamble, one requires money. The more difficult it is to place a wager the less viable the activity becomes. Accordingly, it has been suggested that a way to suppress Internet Gambling would be to restrict the major form of payment at this time; credit card transactions. Essentially, it would be made illegal for a regulated financial institution to participate in an on-line gambling transaction.

Grabosky and Smith suggest two extremes for electronic commerce and predict the dust will settle somewhere in the middle, "...governments may seek to monopolise electronic money, and impose a system which would be fully traceable. This would enable law enforcement agencies to track the use of money with an omniscience which has heretofore been unimaginable... Yet another scenario would see private monetary systems develop, beyond the regulatory purview of

¹ It is to be noted that with the click of a button the offending application can be propagated to another location and all clients advised of the new contact details. The efficacy of this approach is questionable.

the state. Private corporations, large and small, would compete for "market share", with security, integrity, and perhaps total anonymity being their selling points" [9].

Indeed, it is my belief that should governments move to restrict legitimate (well regulated) financial institutions the latter hypothesis from Grabosky and Smith's would hold true. **That is, restriction of legitimate financial institutions would only serve to create new markets for private online banking and further diminish a government's fiscal control.**

Already, there are several internet gambling suppliers who also operate digital banks in off-shore loosely regulated tax havens. These digital banks are reported to already have millions of accounts active. It may not be entirely clear if these banks were established purely to facilitate money laundering in conjunctions with the Internet Casino or if they were established in the event a restriction was placed on traditional financial institutions.

Essentially, a player would instruct Visa, say, to transfer a sum from their credit account to the digital bank. The currency would be converted into "E-currency" and this might be used for many purposes; to purchase C.D.s, books, or virtual chips and casino tokens. Visa would not be privy to the subsequent transaction and in all probability the digital bank would be located in a jurisdiction over which the domestic regulator (e.g. Australia) had no authority. Accordingly all Visa would be facilitating in an electronic transfer of funds to a private financial institution and thereby have nothing to report or to reasonably suspect in relation to say a requirement to report and/or block Internet Gambling transactions.

"DRACONIAN" METHODS

"On each landing, opposite the lift shaft, the poster with the enormous face gazed from the wall. It was one of those pictures which are so contrived that the eyes follow you about when you move. BIG BROTHER IS WATCHING YOU, the caption beneath it ran" [8].

Some other methods that could be considered, although considered quite extreme and ineffective follow:

1. The cable from a computer keyboard and monitor² act as aerials radiating signals. Accordingly, law enforcement could patrol the streets in a suburb with "listening" equipment that would detect these signals (it is arguably of no use monitoring communications at a phone exchange given encryption), and automatically filter them to detect illicit commands or actions.
2. Setting up a sting operation with a "false" illegal site is another aspect, however there is the issue of entrapment.
3. To collect proof of the citizen's crime, law enforcement might rely on a family member or

² Although there are anti-surveillance programs available that "scramble" the on-screen display such that it is readable to the human sitting opposite the screen, but illegible when signals are detected and the image attempted to be re-constructed.

other "insider" reporting the activity and providing proof.

4. Prosecute a few "sacrificial lambs" to prove... "It can happen to you." Instill a fear into the general population that "Big Brother is Watching You", so don't try or you might get caught.

POLICY OVERVIEW

Draft Regulatory Model

In 1997, the Australia State and Territory Regulators prepared a draft model outlining a cooperative approach [13]. The model was not prepared on the basis of research, but application of an understanding of gambling regulation by arguably the most effective gambling regulators in the world. Interestingly, no party was a signatory to the model, however, several jurisdictions set about defining legislation and regulations which complied with the principals laid down in the model. The major points of disparity have been those of tax rate and player identification.

Observations of the key points of the model follow:

- The approach seeks to minimise the impact of products provided from overseas or illegal sources by maintaining (and creating) obstacles to their advertising and marketing and by providing alternative products where the entitlements of players are protected.
- The legislation will provide for the free flow of information between regulatory bodies in each State and Territory and a licensing scheme will be based on a system of mutual recognition... admirable objectives, however to date the level of information exchange on matters of domestic gaming has been somewhat limited and licensing schemes remain independent between jurisdictions.
- Operational controls over each product will be technology based using similar principles to those used to control and regulate existing gaming networks. Again an admirable objective, but currently all jurisdictions take a different approach. There is no standard, so by default applying similar principles will result in divergence.
- Issues such as a demonstrable ability of the operator to pay prizes, approvals of gaming equipment, privacy, lodgement of complaints, provisions for problem gambling, provisions in the Legislation and a general code of conduct are considered.
- Prohibition of credit betting, provision for self-exclusion and problem gambling service contact is to be commended, as is the requirement for proof of identity. However these matters, as with all restrictions imposed by the model, can only apply to Internet gaming services offered from within Australia.
- The model is contradictory in that on one hand alternate sites and interactive terminals in those sites are not envisaged, but on the other hand provision is made for a TAB or

bookmaker to offer virtual lotteries, casino games and machine gaming. The model states that regulators will be subject to a Uniform Enforcement Code, but in numerous locations refers to individual jurisdictions setting requirements – how can one uniformly enforce different rules? The model does not propose a prescriptive technical national standard, but then requires independent testing...this begs the question, “Testing against what?”

- Powers of Inspectors are defined, but what jurisdiction will they have in sister States and overseas? Matters of extradition, and international cooperation are better dealt with at a Federal level?
- Taxation will be applied on the basis of location of residence of the player and will be set by the Government of the jurisdiction of the player’s residence. It is envisaged that taxation on overseas sourced bets would be lower than for local bets. The rate of local tax is to be no greater than for existing products. Furthermore, the fee structure and licence term will be set by each Jurisdiction. Such a policy approach would tend to promote the "prostitution" of the States and Territories, by trying to sell themselves by undercutting their neighbours. Perhaps the revenue sharing arrangement can work, but I only see it working where taxes, fees and charges are consistent and centrally controlled.

All service providers are required to test the validity of a player’s jurisdiction of residence and may have an action taken against them where they do not. Internationally, this is a challenging task. Furthermore, by insisting that the service provider know the origin of its players, this implies to me that the Regulator may not allow a service provider to accept a bet from a player where gaming is illegal.

The model calls for no Federal Government involvement. Indeed, it concludes by stating that, “the effect of licence conditions imposed at the Federal level would be somewhat cosmetic.”

A Successful World First

Lasseters Online has been operating since April 1999. It is the world's first regulated online casino, operating under legislation and regulations set by the Northern Territory Government. In consideration of the "Draft Model", my company (GGS) was contracted by the Northern Territory Government in early 1988 to assist in ensuring that "world's best practice" was applied to the Lasseters site...difficult to do when your faced with a world first. In any event we applied many existing regulations that apply to land based (terrestrial) forms of gaming, games and gaming systems along with numerous department of defense requirements and international standards.

Lasseters is considered to be a "role model" in terms of the extent, nature and application of regulation.

A former employee of the Northern Territory, Mr Alan Pedley, stated during the Lasseters project that: "The Northern Territory is to Australia what Australia is to the World: Economically small and Isolated. We get it right in the NT and we get it right for Australia."

Queensland, Victoria, Norfolk Island, ACT and Tasmania have since all enacted legislation which has evolved and continues to evolve. It is expected that in 2000, several of these jurisdictions will enjoy new Internet Gaming Operations at an evolving level of regulatory compliance equal to or exceeding the Lasseters experience.

Gambling Policy Inconsistency

The fact remains however, that relatively limited regulatory controls apply to Internet sportsbetting and wagering operations in Australia and insignificant regulations apply to on-line share (day) trading. In my submission to the Senate Committee [14] I put forward the following propositions:

"Perhaps the major difference between wagering and gaming is that the results of a wagering event are generally determined independent of the operator in that the result is based on some event whereby the punter may confirm the results independently. Alternately, the results of a gaming event tend to be based on a random selection process under the "control" of the operator.

In any event, player fairness, security, protection of player funds and many other principles are common between wagering and gaming events, however to date there is an inconsistency in the level of controls placed on gaming and on wagering operators."

In a society that promotes equality it continues to bemuse me that the share market is overlooked whenever the matter of problem gambling arises. It has been said that those who criticise gambling play the stock market, but do woe to those who suggest they engage in the activity of "gambling". How is it that financial institutions will lend large sums of money to allow people to purchase shares, whilst to lend money to a punter to purchase chips or keno tickets, for example, is not permitted...and nor should it be." I would continue to add that with the advent of day trading and short term fluctuations, we have what is in effect wagering on a random event, as in a short space of time the "trend" is effectively non-deterministic.

Australia has established a perception internationally of being the most tightly regulated Internet Gambling Jurisdiction in the world. However this is not the case. The reality only applies to Gaming at this point in time.

Productivity Commission

On the 26 November 1999 the Australian Productivity Commission issued what is considered to be the most comprehensive research works on gambling benefits and impacts in the world to date. The Report is titled, "Australia's Gambling Industries". Chapter 18 is titled, "Policy for New Technologies" and its primary focus is Internet Gambling. The most significant and indeed sound, key messages, follow [11]:

- "Prohibition of online gambling would clearly reduce gambling problems associated with the internet, but would also eliminate any benefits of the technology."
- Managed Liberalisation - with tight regulation of licensed sites to ensure integrity and consumer protection - has the potential to meet most concerns, as long as the approach is national.

- Uncertainty about the magnitude of the possible impacts of internet and interactive gambling, would normally suggest a more gradual implementation of liberalisation, but this may not be feasible given the nature of the technology."

The Productivity Commission Report does NOT suggest that Internet Gambling is the major factor in the incidents of domestic problem gambling, yet the Australian Prime Minister has made it quite clear that his preferred position is prohibition of Internet Gambling.

Senate Select Committee on Information Technologies

In March 2000 the Parliament of the Commonwealth of Australia published "Netbets: A review of online gambling in Australia". The report was produced by the Senate Select Committee on Information Technologies and is a well researched document produced with significant industry and community consultation. The key recommendation being Recommendation 1: "The Committee recommends that Federal, State and Territory governments work together to develop uniform and strict regulatory controls on online gambling with a particular focus on consumer protection through the Ministerial Council on Gambling" [12].

Foreign Trade Policy

Australia is perhaps the only country in the world with the exceptions of the USA, Canada and the UK to be positioned to establish a viable and credible Internet Gambling Industry on a massive scale. This positions Australia equally well to be a global hub of E-Commerce. At this time, Australia is the only country that is presenting a viable and credible regulatory regime. This regime at present has attracted significant interest from US based transnational corporations with significant brand names.

Current Prime Ministerial Position

It is worthy of note that the Australian Prime Minister has adopted a view to prohibition of Internet Gambling, despite the best advice of two well researched Federally funded government reports, detailed "responsible gambling" provisions in requirements defined by State and Territory regulators, and demonstrable evidence of socially considerate measures employed in the Lasseters OnLine Site that do not apply in any terrestrial club, hotel, or casino.

My suggestion is not through prohibition, not through deregulation but through a national and multilateral, proactive and responsible approach that involves federal and state governments and industry.

An industry association that provides credibility.

The product is *gambling*, the commodity is *name brands, regulation, right of appeal, established financial institutions, social responsibility, fair games, customer service.*

A global economy is all about consumer choice!

But is there another approach? We shall now explore the possibilities.

5. THE GAMES

The objectives of gaming being “fair”, “profitable” and “publicly acceptable” are achieved via Government regulation of game functional specifications (refer to Author’s 1993 paper *titled Socially Responsible Introduction of Gaming Machine Technology*) such as:

- percentage of wager returned to the patrons;
- maximum amount able to be wagered;
- size and frequency of prizes;
- accuracy and clarity of game play instructions, and
- outlawing of credit betting (as opposed to betting with a credit card).

The compliance with specific Government requirements in these areas results in games that provide a balance between maximum profit and social considerations by regulating an individual's utility function.

For an offshore operation, there is no way an Australian gaming regulator can police or influence any of the game design criteria. Consequently, as the social welfare issue may be of no concern to an off-shore gaming operator (the burden is borne by someone else’s country), the games may be structured to maximise profit, may employ psychological manipulation techniques, and may not be fair at all! The choice to play or not to play ultimately resides with the individual.

A relationship of mutual causality exists between technology and society. This complex relationship leads to the creation of immediate or first order effects, and higher order effects. For example, if the legislation is structured such that the implementation of gaming technology regulates an individual's utility function (that is, the amount of money an individual may risk), the first order effect is that gambling revenue, consequently taxation, is not maximised. However, if revenue from gambling taxation is maximised, a second order effect may be an escalation in financial difficulties experienced by some gambling members of the community. Which in turn may have a third order effect of a higher crime rate and/or increased costs for community welfare services, or diversion of funds from other forms of business. The net tangible/intangible benefits may therefore be less than the expectation when only first order effects are a variable in the equation.

To 'control' an individual's utility function, one must ultimately restrict the quantity of money that may be wagered on a given device in a given period of time. In achieving this goal, there are a number of factors which must be considered and can be enforced upon a willing participant.

Government sets policy which is translated into technical requirements for gaming equipment. Gaming equipment is then designed and built by gaming companies in accordance with the standards. The equipment is not permitted to be sold or operated in a jurisdiction unless the equipment has been tested and certified as complying with the published standards. Once approved and operational, the gaming equipment must further be operated within an environment of government approved internal controls and operating procedures.

6. CONCLUSION

REFERENCES

STEVE TONEGUZZO

MANAGING DIRECTOR

The Toneguzzo Group

PROFILE

Mr Stephen Toneguzzo is Managing Director of *The Toneguzzo Group*, comprising *GGS* and *e-Synergies* where he is responsible for both the management of the company and specialised consultancy. *GGS* is the world leader in the evaluation and auditing of Internet Gambling systems.

Steve holds a Bachelor of Engineering Science, Graduate Diploma in Computer Science, Masters of Engineering Science, is a PhD candidate (Evolution of Technology-Assisted Gambling), and Certified Practicing Engineer. Steve has presented at, and chaired a significant number of conferences. He has published works in university press, text books and other publications related to gambling technology, policy, regulation, commerce and societal implications and is well cited.

Over the past 11 years, Steve has had industry and regulatory exposure to gambling on a global basis. His personal objective is to ensure that gambling, in all forms, continues to be regulated for the protection of the public and of government revenue. Furthermore, that that regulation be consistently administered. Steve has given witness at a state and federal inquiries and is recognised internationally as an expert in his field.