Mr Leon Y. Xiao (lexi@itu.dk) – Response to Inquiry

I. Introduction

1. This is a written response to the Australian House of Representatives Standing Committee on Social Policy and Legal Affairs' Inquiry into online gambling and its impacts on those experiencing gambling harm launched in September 2022 and amended in October 2022.[1]

2. Leon Y. Xiao is a PhD Fellow at the IT University of Copenhagen, a Visiting Scholar at the School of Law of Queen Mary University of London, a Visiting Associate at the Department of Computer Science of the University of York, and a Student Member of The Honourable Society of Lincoln's Inn. He researches the regulation of video games, particularly that of loot boxes and other gambling-like mechanics.

3. My complete, up-to-date conflict of interest declaration is available via: https://sites.google.com/view/leon-xiao/about-me/conflict-of-interest.

4. I primarily address the second clause in the sixth bullet point of the Inquiry's Terms of Reference: '… whether [the definition of 'gambling service'] should be amended to capture additional gambling-like activities such as simulated gambling in video games (e.g. 'loot boxes' and social casino games).'

5. **In brief, my answer is: no, the definition should *not* be so amended and widened. And if it is decided in due course that it should be widened, then Australian policymakers and regulators must proceed with doing so cautiously given Belgium's unsuccessful experience with this policy.**

6. Specifically, I present my research on Belgium's unsuccessful regulation of loot boxes (and social casino games) using gambling law through a broad definition of 'games of chance' (identical to what this sixth bullet point is suggesting).[2] This study was conducted as a registered report meaning that the methodology was

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[1] <aph.gov.au/onlinegambling> accessed 8 December 2022.

[2] Leon Y Xiao, 'Breaking Ban: Belgium's Ineffective Gambling Law Regulation of Video Game Loot Boxes' (forthcoming) Collabra: Psychology <https://osf.io/hnd7w/> accessed 29 July 2022.

peer-reviewed prior to data collection. The study's results have since been peer-reviewed and has been accepted for publication in the journal *Collabra: Psychology*. All information regarding said study is available via: https://rr.peercommunityin.org/PCIRegisteredReports/articles/rec?id=264.

7. I also comment briefly on the fifth and tenth bullet points.

    7.1. **Specifically, for the fifth bullet point, I note that empirical research on loot box-related harm minimisation and consumer protection policies in other countries might be translatable to the traditional online gambling context in Australia and so the Committee should encourage such research.**

    7.2. **Further, for the tenth bullet point, I identify how Mr Andrew Wilkie MP and Mr Andrew Wallace MP misrepresented the study by Etchells *et al.*[3] when Mr Wilkie introduced his private member's bill on loot boxes[4] on 28 November 2022. I make corrections and also note the, in my opinion, inappropriate rhetoric used in Parliament. I urge the Committee to be more prudent in its language and interpretation of the scientific literature.**

8. I understand that 11 November 2022 was stated as the date that submissions should be received by; however, I note that the Inquiry's webpage states that it is still 'Accepting Submissions' as of 10 December 2022. Indeed, I present and comment on matters that arose subsequent to the stated deadline. I hope that this late submission will therefore be considered acceptable.

II. Belgium's Ineffective 'Ban' on Loot Boxes

9. I assume that the Committee is familiar with the relevant academic literature on loot boxes, particularly the differing regulatory positions in various countries.[5]

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[3] Peter J Etchells, Alexandra L Morgan and Daniel S Quintana, 'Loot Box Spending Is Associated with Problem Gambling but Not Mental Wellbeing' (2022) 9 Royal Society Open Science 220111.

[4] Classification (Publications, Films and Computer Games) Amendment (Loot Boxes) Bill 2022 <https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;query=Id%3A%22legislation%2Fbillhome%2Fr6949%22> accessed 9 December 2022.

[5] For a summary, see Leon Y Xiao and others, 'Regulating Gambling-like Video Game Loot Boxes: A Public Health Framework Comparing Industry Self-Regulation, Existing National Legal Approaches, and Other Potential Approaches' (2022) Current Addiction Reports <https://doi.org/10.1007/s40429-022-00424-9> accessed 9 November 2022.

In short, Belgium uniquely defines 'games of chance' or 'gambling' more widely than other countries meaning that *all* loot boxes that players spend real-world money to buy would satisfy the legal definition of 'gambling,' and social casino games similarly fall within the ambit of legally regulable 'gambling' in Belgium. In contrast, the position in Australia has generally been accepted to be that only loot boxes that players spend real-world money to buy, *and* which provides rewards that are worth real-world monetary value would legally constitute 'gambling.'[6] Similarly, social casino games, given the player's inability to 'cash-out' any winnings, would therefore not be regulable gambling in Australia.

10. The second clause of the sixth bullet point of the Inquiry's Terms of Reference is therefore proposing to consider widening the Australian legal definition of 'gambling' to emulate the Belgian position and capture both paid loot boxes that cannot be cashed-out and social casino games. Therefore, how that policy has operated (unsuccessfully) in Belgium in practice can be informative.

11. Even though all paid loot boxes and social casino games are supposed to be 'banned' as illegal gambling in Belgium, when I assessed whether the 100 highest-grossing iPhone games on the Belgian Apple App Store contained paid loot boxes and/or were social casino games, I found that 82% of them continued to do so and/or were such a game and therefore were operating illegally.[7] This is because none of the games identified possessed a gambling licence.

12. I note that some major companies have taken appropriate compliance action after the Belgian gambling regulator issued its interpretation of the law in 2018 and opined that paid loot boxes and social casino games (by implication) constitute illegal gambling.[8] For example, Nintendo and other companies

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[6] Parliament of the Commonwealth of Australia Senate Environment and Communications References Committee, 'Gaming Micro-Transactions for Chance-Based Items' (2018) paras 2.8, 2.12, 2.42, 2.43
<https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Comm unications/Gamingmicro-transactions/Report> accessed 13 March 2021.

[7] Xiao (n 2).

[8] Belgische Kansspelcommissie [Belgian Gaming Commission], 'Onderzoeksrapport loot boxen [Research Report on Loot Boxes]' (2018)
<https://web.archive.org/web/20200414184710/https://www.gamingcommission.be/opencms/ex port/sites/default/jhksweb_nl/documents/onderzoeksrapport-loot-boxen-final-publicatie.pdf> accessed 14 April 2020.

removed certain games from the Belgian market[9] or removed the ability to purchase loot boxes with real-world money in Belgium following that announcement.[10] Further, companies like Blizzard Entertainment chose not to publish certain games that relied on loot boxes to monetise in Belgium.[11]

13. However, importantly, many companies did *not* comply with the law. This also includes major companies, such as Roblox Corporation, the developer and publisher of the sandbox game, *Roblox*, which is highly popular with young children. *Roblox* reportedly finally took compliance action only after the publication of a preprint of my study and popular media reporting thereof by video game media outlets.[12] This was *more than four years* after the Belgian regulator announced their interpretation of the law and expressed their intention to criminally prosecute non-compliant companies (which, in hindsight, was revealed to be an empty threat that was never carried through).

14. I met with the Belgian gambling regulator following my study to discuss the results. The Belgian Minister of Justice, Mr Vincent Van Quickenborne, responded to the results of my study at the request of Belgian media.[13] My results were accepted despite their critical nature. In short, the response is that the regulator is underfunded and does not have enough resources to enforce the law. Enforcing the law is also practically difficult given how many video games are available on various platforms (more than 1 million on the Apple App Store

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[9] Nintendo, 'Belangrijke informatie voor gebruikers in België [Important Information for Users in Belgium]' (*Nintendo Belgium*, 21 May 2019) <https://www.nintendo.be/nl/Nieuws/2019/mei/Belangrijke-informatie-voor-gebruikers-in-Belgie-1561911.html> accessed 3 August 2020.

[10] 2K Games, 'Statement Belgium' (*2K Games Official Website*, 2018) <https://www.2k.com/myteaminfo/be/> accessed 12 March 2021.

[11] Danielle Partis, 'Diablo Immortal Reportedly Won't Launch in Two Countries Due to Loot Box Legislation' (*GamesIndustry.biz*, 30 May 2022) <https://www.gamesindustry.biz/articles/2022-05-30-diablo-immortal-wont-launch-in-two-countries-due-to-loot-box-legislation> accessed 30 May 2022.

[12] Justin Carter, 'Roblox Game Adopt Me Ends Netherlands Service Due to Loot Boxes' (*Game Developer*, 15 September 2022) <https://www.gamedeveloper.com/pc/-i-roblox-i-game-i-adopt-me-i-ends-netherlands-service-due-to-loot-boxes> accessed 4 October 2022.

[13] In Dutch, the news article was published in two outlets: Timon Ramboer, 'Ze zetten kinderen aan tot gokken, maar worden zomaar verkocht: 8 op 10 games verkopen nog steeds "lootboxes"' (*Het Nieuwsblad*, 13 August 2022) <https://www.nieuwsblad.be/cnt/dmf20220812_97460883> accessed 27 September 2022; Timon Ramboer, 'Ze zetten kinderen aan tot gokken, maar worden zomaar verkocht: 8 op 10 games verkopen nog steeds "lootboxes" [They encourage children to gamble, but are simply sold: 8 out of 10 games still sell 'loot boxes']' (*Gazet van Antwerpen*, 13 August 2022) <https://www.gva.be/cnt/dmf20220813_09388283> accessed 27 September 2022.

alone, not counting regular updates to already published games). It should also be noted that the gambling regulator has expertise in traditional gambling and does not necessarily have expert knowledge of video games.

15. Having been presented with the unsatisfactory situation in Belgium, one must ask: would an Australian gambling regulator with the same mandate be able to do better than the Belgian regulator?

16. In my view, it must be recognised that a bit more financial investment and recruitment of relevant personnel (which would not incur a disproportionate cost) would likely result in better compliance. The burden of enforcing the law could also be shifted onto platforms like Apple, which operates the Apple App Store and takes a cut (~30%) of all criminal proceeds from illegal loot boxes.

17. However, complete elimination of the mechanic is likely not practically achievable. I was able to demonstrate that dedicated players can always easily circumvent any bans on loot boxes and access removed loot boxes or unpublished games by using a VPN (Virtual Private Network) or changing their device's/store's country setting. This problem with potential circumvention has also not been solved with traditional online gambling or crypto gambling.[14]

18. Criminalising loot box purchasing by individual players and seeking to punish them cannot be recommended, given that this would stigmatise the activity and players who engage in it and likely compound loot boxes' potential harms.

19. Given the potential shortcomings of the banning/regulating loot boxes as gambling approach, I have recommended that a more nuanced, less restrictive regulatory approach aimed at providing choices to players be adopted: for example, encourage or even require companies to (i) provide players with the alternative option of directly purchasing (at a reasonable price) any and all loot box content or (ii) provide all loot box content after a certain reasonable and predetermined amount of money has been spent by a player.

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[14] For the situation with crypto gambling, see Maira Andrade and others, 'Safer Gambling and Consumer Protection Failings Among 40 Frequently Visited Cryptocurrency-Based Online Gambling Operators' (2022) Psychology of Addictive Behaviors <https://doi.org/10.1037/adb0000885> accessed 8 November 2022.

20. **I recommend that the Committee consider how enforcement of Belgium's policy (which Australia is considering emulating) has not been satisfactory.**

21. **If the definition of gambling is to be expanded, I recommend that the Committee ensure that the relevant regulator is well-funded and staffed by personnel with relevant expertise; that platforms, such as Apple, be invited (or required) to assist with compliance and potentially be made legally liable for inaction; and that the enforcement and compliance situation be actively monitored and publicly reported on by independent parties.**

22. **I recommend that the Committee consider alternative, less restrictive regulatory approaches to loot boxes than regulating them as traditional gambling or 'banning' them.**

III. The Loot Box Literature Might be Relevant to Online Gambling

23. In relation to the fifth bullet point 'the impact of current regulatory and licensing regimes for online gambling on the effectiveness of harm minimisation and consumer protection efforts,' I make a very simple point: research on the policies regarding adjacent products, such as loot boxes, in other countries might be informative.

24. Our empirical study on loot box policy (both legal and industry self-regulatory) in China[15] and the UK[16] and on crypto gambling consumer protection features might be translatable.[17]

25. **I recommend that the Committee consider empirical research on the experience of other countries' regulatory policies and call for similar further research in Australia and funding thereof, similarly to the UK's Video Games Research Framework.**

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[15] Leon Y Xiao and others, 'Gaming the System: Suboptimal Compliance with Loot Box Probability Disclosure Regulations in China' (2021) Behavioural Public Policy <https://doi.org/10.1017/bpp.2021.23> accessed 9 December 2022.

[16] Leon Y Xiao, Laura L Henderson and Philip Newall, 'What Are the Odds? Lower Compliance with Western Loot Box Probability Disclosure Industry Self-Regulation than Chinese Legal Regulation' (OSF Preprints, 30 September 2021) <https://osf.io/g5wd9/> accessed 1 October 2021.

[17] Andrade and others (n 14).

IV. The Introduction of Mr Andrew Wilkie MP's Private Member's Bill

26. In relation to the tenth bullet point regarding any further miscellaneous matters, I feel obliged to correct the record in relation to Mr Andrew Wilkie MP's and Mr Andrew Wallace MP's speeches in Parliament on 28 November 2022 when Mr Wilkie introduced his Private Member's Bill.

27. I do not comment on the substance of that Bill in detail; I find its proposal to be plausible, and I think many would likely agree. Instead, I highlight how Messrs Wilkie and Wallace misrepresented the study by Etchells *et al.*,[18] and I set the record straight in relation to the findings of the academic literature. I also comment on some of the emotive language and, in my opinion, inappropriate fearmongering rhetoric that have been used when said Bill was introduced.

28. Messrs Wilkie and Wallace both referred to a study 'published in the *Royal Society Open Science* journal in August 2022.'[19] This could only have referred to Etchells *et al.*[20] Mr Wilkie said: '[the study] uncovered a strong link between their purchase and problem gambling.'[21] Mr Wallace said: '[the] study into loot boxes found that there is a strong correlation between loot box and gaming purchases and problem gambling].'

29. I make two corrections. Firstly, a factual correction: Etchells *et al.* did *not* find a strong link or correlation. Instead, it found strong evidence *of a link*. As to the strength of this correlation, one should refer to the two published meta-analyses, which suggest $r = .26$ or $.27$.[22] Such a correlation would generally be interpreted as a weak correlation, albeit not negligible.[23] Prof Etchells, the first author of the study cited in Parliament, also personally corrected this point on Twitter.[24]

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[18] Etchells, Morgan and Quintana (n 3).

[19] Commonwealth, *Parliamentary Debates*, House of Representatives, 28 November 2022, 30–32.

[20] Etchells, Morgan and Quintana (n 3).

[21] Hansard (n 19), 30.

[22] Shaun Stephen Garea and others, 'Meta-Analysis of the Relationship between Problem Gambling, Excessive Gaming and Loot Box Spending' (2021) 21 International Gambling Studies 460; Stuart Gordon Spicer and others, 'Loot Boxes, Problem Gambling and Problem Video Gaming: A Systematic Review and Meta-Synthesis' [2021] New Media & Society 14614448211027176.

[23] Patrick Schober, Christa Boer and Lothar A Schwarte, 'Correlation Coefficients: Appropriate Use and Interpretation' (2018) 126 Anesthesia & Analgesia 1763.

[24] <https://twitter.com/PeteEtchells/status/1597179579579650049> accessed 9 December 2022.

30. Secondly, I correct a misleading omission. Etchells *et al.*'s study has two parts: the first part addressed the relationship between loot box purchasing and problem gambling, whilst the second considered whether practically players' mental health is harmed through loot box purchasing. As to this second part, the study identified *no evidence* of any negative effects on mental wellbeing or psychological distress through loot box purchasing. It was misleading that this important second half of Etchells *et al.* was omitted from both Messrs Wilkie's and Wallace's speeches. For the Committee's information, I note also that Drummond *et al.* have, in contrast, found that players who purchase loot box are more likely to experience psychological distress.[25] The scientific evidence on this issue is mixed and therefore should have been presented as such in Parliament.

31. Aside from how Etchells *et al.* was presented in a biased way. Mr Wilkie said, *inter alia*, (i) 'loot boxes [were] already banned in several countries'[26] and, quoting an Australian mother, (ii) '…the brain of a gamer is exactly the same as that of a heroin addict. It's no different…'[27] I take issue with both statements.

32. Belgium is the only country in the world whose regulatory position can be oversimplified as having 'banned' loot boxes, as detailed above. However, to do so is an oversimplification as Belgian legislators never considered the specific question of whether loot boxes should be banned. It just so happened that, because of the way Belgian gambling law was drafted, loot boxes already fell within its ambit. There was never a positive legislative act to ban loot boxes *per se*. Mr Wilkie's first statement is therefore factually incorrect and potentially misleading by suggesting that other countries have been more proactive.

33. As to the second statement, although I appreciate that this is a direct quote from a member of the public, such an assertion is not supported by scientific evidence, draws an unfair comparison, exaggerates harm, and therefore potentially misleads the public.

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[25] Aaron Drummond, Lauren C Hall and James D Sauer, 'Surprisingly High Prevalence Rates of Severe Psychological Distress among Consumers Who Purchase Loot Boxes in Video Games' (2022) 12 Scientific Reports 16128.

[26] Hansard (n 19), 31.

[27] Hansard (n 19), 31.

34. **I recommend that the Committee be more prudent than Messrs Wilkie and Wallace in its interpretation of the scientific literature and to avoid misrepresentation.**

35. **I recommend that the Committee do not use overly emotive language when engaging with this important issue as doing so potentially misleads the public and alienates both players and video game companies.**

V. Recommendations

36. **I recommend that the Committee consider how enforcement of Belgium's policy (which Australia is considering emulating) has not been satisfactory.**

37. **If the definition of gambling is to be expanded, I recommend that the Committee ensure that the relevant regulator is well-funded and staffed by personnel with relevant expertise; that platforms, such as Apple, be invited (or required) to assist with compliance and potentially be made legally liable for inaction; and that the enforcement and compliance situation be actively monitored and publicly reported on by independent parties.**

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VI. Concluding Remarks

42. The regulation of loot boxes is an important policy issue, and I am glad to see the Committee engaging with this product that has proven difficult to regulate fairly and effectively.

43. My personal view is that we should no longer waste our time with considering whether loot boxes are a form of gambling (and potentially changing the law to achieve that). Loot boxes should be regulated regardless of one's answer to that question. Oversimplifying them as a form of gambling ignores the possibilities of regulating loot boxes in more inventive manners that are not possible with traditional gambling activities.[28] Doing so also raises the uncomfortable and difficult-to-answer question of why physical products, such as collectible card packs, which are effectively physical loot boxes, are not regulated even though they likely satisfy *existing* legal definitions of gambling.[29] I intend to carefully set out my thoughts on this point in the near future.

VII. Legal Disclaimer

44. The views and recommendations expressed herein are those of Mr Leon Y. Xiao personally, based on a reasonable search and analysis of publicly available information. No representation or warranty is given as to the accuracy or completeness of the information provided; other people considering the same might reach different conclusions from those reached by Mr Xiao. To the extent permissible by law, Mr Xiao accepts no liability or responsibility, whether in contract, in tort (including negligence), under statute or otherwise, in respect of any loss or damage (whether direct or indirect) suffered by any party: (i) as a result of, or in connection with the content of, or any omissions from, this response; and/or (ii) as a result of any actions taken or decisions made by any person as a consequence of the views and recommendations contained herein.

LEON Y. XIAO

10 December 2022

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[28] See Leon Y Xiao and Philip WS Newall, 'Probability Disclosures Are Not Enough: Reducing Loot Box Reward Complexity as a Part of Ethical Video Game Design' (2022) 50 Journal of Gambling Issues <https://doi.org/10.4309/LDOM8890> accessed 26 July 2022.

[29] Leon Y Xiao, 'Blind Boxes: Opening Our Eyes to the Challenging Regulation of Gambling-Like Products and Gamblification and Unexplained Regulatory Inaction' (2022) 26 Gaming Law Rev 255.