

Annex 1 – RTP

For background, the Commission currently has a strategic aim to improve our understanding of issues that pose a risk to the Fair and Open licensing objective of the Gambling Act 2005, in particular to understand what is important to consumers in this area. This will enable us to better target our resources and support the gambling industry to better understand where consumer interests lie.

We recognise that RTP is essentially a mathematical concept to describe the theoretical average percentage of the *overall* value of money committed to a game that is expected to be returned to the *overall* player base. The percentage is usually calculated by testing several hundred thousand ‘games’ or more. For example, for every £1,000,000 theoretically committed to play a game, if that game is expected to pay out £900,000 back in wins, the theoretical average RTP is described as 90%. Importantly, as RTP is calculated over the long term, it does not serve as a reliable indicator of what an individual player might experience in a single gaming session.

With regards to consumer complaints data concerning RTP, we are nevertheless able to understand consumer impact through our own research programme and research conducted by other bodies. One of the areas we have identified through our research as being important to consumers is that of ‘fair gameplay’ which includes issues such as the clear and accurate display of odds and win ratios. Concepts such as RTP fall within that. You may be interested to read the research we recently commissioned which [explored the drivers of consumer trust in gambling](#).

There is a reasonable body of research suggesting that consumers can misinterpret the meaning of RTP messages. There are limitations in the evidence base, insofar as much of the evidence relies on self-report data from simulated gambling (ie where studies have been carried out in environments which are not reflective of gambling behaviour in the real world). Nevertheless, the evidence base does suggest that RTP can be a misunderstood concept.

For your interest, some of those research reports are provided here:



[understanding-of-return-to-player-messages.pdf](#)

[Gamble-Aware-Report.pdf](#)

[How best to improve upon return-to-player information in gambling? A comparison of two approaches in an Australian sample | Experimental Results | Cambridge Core](#)

[Full article: How does the phrasing of house edge information affect gamblers' perceptions and level of understanding? A Registered Report](#)

[2022-05 - Comprehension of gambling odds - BIT experimental results](#)

We have noted the conclusions of those reports. For example, some of those studies found that research participants are more likely to correctly understand house-edge than RTP, and to perceive a more realistic chance of winning with house-edge information than with RTP information. They also theorise that a combination of house edge and volatility information may yield the best results for player comprehension, and that information which explains what a gambler might expect to lose (rather than inferring win expectations) could help gamblers to pay greater attention to product risk.

We are also mindful, however, that consumer misunderstanding of concepts such as odds, win ratios and RTP should not necessarily be overstated. As part of our consumer trust research mentioned above, there is data concerning where consumers were most likely to indicate positive sentiment towards the gambling industry's performance.

- 54% of participants agreed that “odds and win ratios are prominently displayed in places I gamble” (34% neither agreed nor disagreed, 12% disagreed).
- 51% agreed that “offers, odds and products advertised by operators are clear, easy to understand and not misleading” (33% neither agreed nor disagreed, 16% disagreed).

- 47% agreed that “odds and win ratios accurately represent the likelihood of winning” (36% neither agreed nor disagreed, 17% disagreed).

As part of our strategic commitment described above, we will explore further whether the transparency of RTP information to players can be improved.

For context, it is important to note that many jurisdictions have explored the concept of RTP – indeed, some of the research provided above was conducted in Australia – and we are not aware of any jurisdiction that has discovered an ‘optimal solution’ to explaining RTP nor how to replace it with alternative concepts. This is in part because, while some consumers have a very sound grasp of what ‘RTP’ conveys, other concepts such as house edge and volatility also meet with some consumer misunderstanding due to their complexity and perceived ambiguity.

Compensated games

We do not have a view on the speed at which compensated gaming machines might achieve their target RTP, in comparison to random games. However, our Gaming Machine Technical Standards impose a number of requirements in respect of compensated games. I have outlined these in detail below:

The use of compensators or regulators to determine any stage of the game outcome is permitted, except in the case of ‘pre-gambles’, provided that the following rules are complied with;

- a. each possible permutation or combination of game elements that produces winning or losing game outcomes must be available for selection at the initiation of each play.*
- b. the outcome of any gamble must not be predictable to the player;*
- c. cyclic periods of play must not be deliberately introduced and due care must be exercised to prevent their inadvertent occurrence;*
- d. the chance of winning a prize must not be so altered as to deliberately create a series of losing (raking periods) or winning games (enriched periods);*

e. any sequence of wins must not exceed that to be expected from a random machine of a similar payout profile and running at the same payout percentage.

A gaming machine or device must not present a losing game result which indicates a 'Near Miss', e.g. where the odds of the top award symbol landing on the pay line are limited it must not frequently appear above or below the pay line.

A compensated game must clearly display to the player on the face of the machine at all times (when in operation) or at the point the game is selected for play (where operated on a multi-game terminal) the following statement:

THIS GAME IS COMPENSATED AND MAY BE INFLUENCED BY PREVIOUS PLAY

Where a machine operates in such a way that a particular feature (such as Hi/Low or gamble) may invite a player to make a choice in circumstances in which they have no chance of success (defined by the probability of a win being reduced to less than 20% of that required to achieve the target percentage payout) then the following statement must be substituted for the above:

***THIS GAME IS COMPENSATED AND MAY BE INFLUENCED BY PREVIOUS PLAY
AND OFFER THE PLAYER A CHOICE WHERE THERE IS LITTLE CHANCE OF
SUCCESS***

Public health messaging

As part of its review of the Gambling Act, the Government considered the quality of current safer gambling messaging and concluded that it would be beneficial to develop systematic messaging to maximise the information available to consumers and enable them to make informed decisions with a better understanding of the risks.

In its [White Paper](#), which clarified the Government's policy intentions, it stated that the Department for Health, Department for Culture, Media and Sport and the Gambling Commission will work together, drawing on public health and social

marketing expertise, to develop a robust approach to informational messaging throughout the user journey.

The key requirements for gaming machine information [are outlined in regulations](#), and essentially require a machine to display information about the proportion of amounts paid to use the machine that is returned by way of prizes.

Our gaming machine technical standards provide further clarity to support these regulations, in particular that:

- *The theoretical target percentage return to player must be clearly displayed to the player on the machine in the appropriate alternative format:*
- *i) in cases in which the percentage return to player does not depend upon the strategy used by the player*

**THIS MACHINE HAS AN AVERAGE PERCENTAGE PAYOUT OF AT LEAST
(VALUE) %**

- *Where there is a range (a lower and upper percentage return to player available within the same game) it must be the lower value that is displayed.*

Additional Information

You may also find the following research of assistance, concerning the Evidence Assurance refresh that was conducted earlier in the year: [EA - Machines Refresh Feb 2026.xlsx](#)

In particular, the references to RTP can be found at:

- Tab 2,3: Row 49. [Newall et al \(2020\) Equivalent gambling warning labels are perceived differently](#)
- Tab 2,3: Row 51: [Beresford and Blaszczynski \(2020\) Return to player percentage in gaming machines: Impact of informative materials on player understanding.](#)

- Tab 2,3: Row 52. [Newall et al \(2020\) House-edge information yields lower subjective chances of winning than equivalent RTP percentages](#)
- Tab 2,3: Row 56. [Newall et al \(2022\) House-edge information and a volatility warning lead to reduced gambling expenditure. Potential improvements to RTP percentages](#)
- Tab 2,3: Row 57. [Newall et al \(2022\) How best to improve upon RTP information in gambling? A comparison of two approaches in an Australian sample.](#)
- Tab 2,3: Row 58. [Newall et al \(2022\) Nudge versus sludge in gambling warning labels: How the effectiveness of a consumer protection measure can be undermined.](#)
- Tab 2,3: Row 59. [Newall et al \(2023\) How does the phrasing of house edge information affect gamblers' perceptions and level of understanding?](#)
- Tab 2,3: Row 74. [Weiss-Cohen et al \(2025\) Never tell me the odds: Typical RTP information increases gamblers' perceived chances of winning.](#)

Please also see the following links to information published on the Commission website:

- [Live return to player performance monitoring of games of chance](#)
- [Return to player - how much gaming machines payout](#)
- [Feature article - How can gaming machines meet their %RTP if they are random?](#)