Certification Report.	PragmaticPlay Game Audit Report - Bingo 90
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UKAS ISO/IEC 17025 Accreditation No.	9263
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Report prepared for	PragmaticPlay Ltd 144 Tower Road, Sliema - SLM 1604 Malta
Jurisdiction	Malta Gaming Authority Malta
Technical Standards used for testing	Remote Gaming Regulations 2004, Legal Notice 176 of 2004 of the Lotteries and other Games Act (ACT XXIV OF 2001), 20 April 2004 and as amended by Legal Notices 110 of 2006, 270 and 426 of 2007, 90 of 2011 and 131 of 2016.

Gaming Associates

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1 Notations

1.1 Confidentiality

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This document, its themes, and ideas are strictly confidential and may not be used in any manner other than its expressed purpose, without the written permission of the author. The document is for PragmaticPlay and the Malta Gaming Authority.

The documents are copyright.

1.2 Disclaimer

ga has reported on what it has discovered through evaluation of PragmaticPlay's game Bingo 90.

2 Administration

2.1 Contents

1 Notations 2
1.1 Confidentiality 2
1.2 Disclaimer 2
2 Administration 3
2.1 Contents 3
2.2 Version 3
3 Executive Summary 4
3.1 Introduction 4
3.2 Scope of Testing 4
3.3 Testing Limitations Due to the Test Environment 4
3.4 Test Summary 4
3.5 Conclusions and Recommendations 5
4 Test Results 6
4.1 Third Schedule Regulation 25: Technical Requirement for Gaming System 6
4.2 Game Rules 7
4.3 Payouts 13
4.4 Return to Player 13
5 References 14
Annex A : SHA-1 Hashes 15
End of Document 15

2.2 Version

Version	Description	Date
V0.1	Initial draft – SHRQ	2019-04-17
V0.2	Reviewed & Updated – DEVI	2019-05-21
V1.0	QA - UVAS	2019-06-05
V2.0	Updated – SDEV	2019-08-14

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3 Executive Summary

3.1 Introduction

PragmaticPlay Ltd. (PragmaticPlay) has requested Gaming Associates (**ga**) to test their game Bingo 90 against the compliance requirements of the Remote Gaming Regulations 2004.

ga has tested PragmaticPlay's game Bingo 90 against the Malta Gaming Authority (MGA) compliance requirements listed in Section 3.2 Scope of Testing. This report presents the results of testing performed by **ga** for the Bingo 90 game. Hashes of the game are listed in Annex A: SHA-1 Hashes.

3.2 Scope of Testing

The scope of testing is to verify compliance against the following requirements of the "Remote Gaming Regulations 2004, Legal Notice 176 of 2004 of the Lotteries and other Games Act (ACT XXIV OF 2001)", dated 20 April 2004:

- Third Schedule Regulation 25: Technical requirement for gaming system.

This compliance evaluation does not include evaluation of the Random Number Generator (RNG).

This game was already certified by **ga** and re-certification performed because of the new feature added in the game.

3.3 Testing Limitations Due to the Test Environment

Since Bingo 90 has been tested in a test environment, the following Malta Gaming Authority requirements could not be tested and need to be verified when the game is integrated with a gaming platform:

- 2. Both the gaming and financial transactions must be congruent and secure.
- 6 (b) - The gaming system must be able to display for each game the following information on the current page or on a page directly accessible from the current page via a hyperlink:- (b) restrictions on play;
- 7. All financial reports produced by the gaming system must be congruent with gaming transaction reports and conversely: Provided that all such reports shall be readily and freely available to the Authority.
- 8. The gaming system must:- (a) be capable of producing monthly auditable and aggregate financial statements of gaming transactions, and (b) calculate accurately all taxation and other monies due to the Authority.
- 10. The gaming system must maintain information about significant events as follows:-
  - (a) large wins;
  - (b) transfers of funds in excess of such amount as the Authority may from time to time direct by notice in writing to the operator;
  - (c) changes made by the operator to game parameters.

3.4 Test Summary

1. Game name: Bingo 90
2. Channels (game clients):
   HTML5: Supports Desktop and Mobile browsers
3. Game version: N/A
4. Versions of games that the game supersedes: None
5. Theoretical return to player (RTP): 70.00%

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6. Jackpot: Yes

3.5 Conclusions and Recommendations

PragmaticPlay's game Bingo 90 complies with the requirements of the "Remote Gaming Regulations 2004, Legal Notice 176 of 2004 of the Lotteries and other Games Act (ACT XXIV OF 2001)", dated 20 April 2004. However, some requirements, identified in Section 3.3 of this report, need to be verified when the game is integrated with a gaming platform.

ga recommends PragmaticPlay's game Bingo 90 to be approved for integration with gaming platforms already approved by the MGA.

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4 Test Results

This section summarises the results of the tests performed on PragmaticPlay's game Bingo 90. The tables in the following sub-sections provide the compliance status of the game against MGA requirements listed in [1]. Different values used in the "System Compliance" column are described as follows:

Compliant: The game complies with the requirement.

Does Not Comply: The game does not comply with the requirement.

Dispensation Granted: The game does not comply with the requirement; however, a dispensation has been granted by the MGA.

Dispensation Requested: The game does not comply with the requirement; however, PragmaticPlay has requested a dispensation from the MGA.

Pending: The requirement could not be verified at the time of game evaluation.

Acknowledged: The requirement is only a statement or information.

N/A: The requirement is not applicable to the game.

Out of scope: The requirement cannot be evaluated at this stage due to the current scope of testing or limitation of the test environment.

4.1 Third Schedule Regulation 25: Technical Requirement for Gaming System

Malta Requirements	System Compliance	GA Comments
Third Schedule		
Regulation 25: Technical requirement for gaming system		
1. The gaming system must:		
(a) faithfully follow the game rules published by the operator; and	Compliant	The game instructions are available and the game operates and interacts with the players in accordance with the game instructions.
(b) provide over time no more than the expected house advantage to the operator.	Compliant	The game instructions are available and the game operates and interacts with the players in accordance with the game instructions.
2. Both the gaming and financial transactions must be congruent and secure.	Out of scope	Could not be verified because the game has not been integrated with a gaming platform.
3. The gaming system must satisfy the following criteria for randomness, following Schneier:-		
(a) the data must be randomly generated, passing appropriate statistical tests of randomness;	Out of scope	Evaluation of the RNG is out of scope.
(b) the data must be unpredictable, i.e. it must be computationally infeasible to predict what the next number will be, given complete knowledge of the algorithm or hardware generating the sequence, and all previously generated numbers;	Out of scope	Evaluation of the RNG is out of scope.
(c) the series cannot be reliably reproduced, i.e. if the sequence generator is activated again with the same input (as exactly as is reasonably possible) it will produce two completely unrelated random sequences.	Out of scope	Evaluation of the RNG is out of scope.
4. The outcome of any game event, and the return to the player, must be independent of the CPU, memory, disk or other components used in the playing device used by the player.	Compliant	The outcomes of the game are independent of the computer or device used by the player.
5. The game or any game event outcome must not be affected by the effective bandwidth, link utilisation, bit error rate or other characteristic of the communication channel between the gaming system and the playing device used by the player.	Compliant	The outcomes of the game are not affected by the bandwidth, link utilisation, bit error rate, etc.
6. The gaming system must be able to display for each game the following information on the current page or on a page directly accessible from the current page via a hyperlink:-		
(a) the name of the game;	Compliant	The name of the game is displayed on the bet page.
(b) restrictions on play;	Out of scope	Could not be verified because the game has not been integrated with a gaming platform.
(c) instructions on how to play, including a pay-table for all prizes and	Compliant	Instructions on how to play, including a

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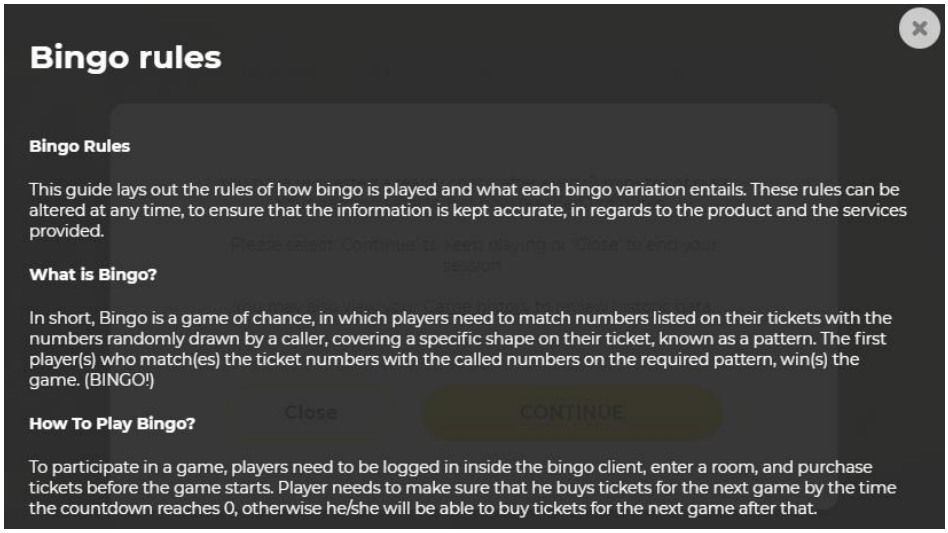
Malta Requirements	System Compliance	GA Comments
special features;		pay table for all prizes and special features are provided.
(d) the player's current account balance;	Compliant	The player's current account balance is displayed.
(e) unit and total bets permitted;	Compliant	The unit bet and total bets are displayed on the bet page.
(f) the rules of the game.	Compliant	The game help file, containing game rules, has been provided.
7. All financial reports produced by the gaming system must be congruent with gaming transaction reports and conversely: Provided that all such reports shall be readily and freely available to the Authority.	Out of scope	Could not be verified because the game has not been integrated with a gaming platform.
8. The gaming system must:-		
(a) be capable of producing monthly auditable and aggregate financial statements of gaming transactions, and	Out of scope	Could not be verified because the game has not been integrated with a gaming platform.
(b) calculate accurately all taxation and other monies due to the Authority.	Out of scope	Could not be verified because the game has not been integrated with a gaming platform.
9. The gaming system must maintain information about all games played, including:-		
(a) the identity of the player;	Compliant	
(b) the time the game began as recorded on the games server;	Compliant	The game start time is provided.
(c) the balance on the player's account at the start of the game;	Compliant	Player's account balance at the start of the game is provided.
(d) the stakes placed in the game (time stamped by the games server);	Compliant	The stakes placed in the game are provided.
(e) the game status (in progress, complete, etc.);	Compliant	The game status is provided.
(f) the result of the game (time stamped by the games server);	Compliant	The result of the game is provided.
(g) the time the game ended as recorded by the games server;	Compliant	The end time of the game is provided.
(h) the amount won or lost by the player; and	Compliant	Amount won or lost during the game is provided.
(i) the balance on the player's account at the end of the game.	Compliant	Account balance at the end of the game is provided.
10. The gaming system must maintain information about significant events as follows:-	Out of scope	Section 10 could not be verified because the game has not been integrated with a gaming platform.
(a) large wins;		
(b) transfers of funds in excess of such amount as the Authority may from time to time direct by notice in writing to the operator;		
(c) changes made by the operator to game parameters.		
11. Any variations to any of the requirements specified in this Schedule shall be submitted to the Authority for its approval by notice in writing.	Acknowledged	

4.2 Game Rules

The following game rules have been verified through functional testing:



When the game starts, the Caller will call out the numbers which the players need to daub on their tickets, to match the pattern required. By default, the game automatically daubs all matching numbers on the bought tickets, but Player can change this option to manually daub the cards on his/own. Either way, any win will be automatically granted.

The winner(s) is/are the first player(s) to match all the numbers on the purchased tickets with the pattern in play. (BINGO!)

Good to Know

The "x to go" is a term used in bingo to reflect how many numbers matching the pattern required the player has on his/her tickets. (e.g. "1 to go" on a ticket means that player needs one more number to be called, in order to bingo on that pattern). Each ticket in play will have an "x to go" value, to help players faster understand the likeliness of winning across multiple tickets.

The players can choose to pre-buy tickets for games that will play at a later time, in which case the players' presence in the bingo room at the time the game is played, is not mandatory for their tickets to play in that game. When pre-buying tickets, the player's account is charged immediately, and the tickets are allocated to the player and played in the moment of the game start. Players can see the games for which they pre-bought, but hadn't played yet, in the My Tickets section.

Players can usually buy any number of tickets up to a maximum per game, but there might be games where all players can only buy the same amount of tickets. Occasionally, there might be free games, where all players receive the same amount of free tickets (free-of-charge games), or some players might receive free tickets that can only be played on certain games (promotional tickets, free tickets).

Bingo Types

There are different types of bingo, each with different number of balls called, patterns, speed and chances of winning.

90 ball

90 ball is one of the most popular bingo types in the UK and in the majority of live bingo halls.

The ticket is made up of 27 squares, which are arranged on a 3 x 9 grid. The first column contains numbers 1-9, the second column contains numbers 10-19 and so on, up to 90. The 90 numbers are randomly spread across each group of 6 tickets, with blank squares on the remaining positions, to ensure that each ticket has unique numbers and all 90 numbers are covered.

This bingo type gives players three chances of winning, having to match either any one row (One Line), any two rows (Two Lines), or all three rows (Full House).

75 ball

75 ball is also a highly popular bingo type, mostly in U.S, for usually being faster than a 90 ball game, and with more diversity in patterns and number of prizes/game.

The ticket is made up of 25 squares, which are arranged on a 5 x 5 grid. These squares are arranged in five columns and five rows, with the center square "free". The first column contains numbers 1-15, the second column contains numbers 16-30 and so on, up to 75. The 75 numbers are randomly spread across tickets. There is usually no grouping of unique number tickets on a 75-ball game.

This variation gives players from one to five changes of winning, each game having its own configuration. The patterns used can be any, in any custom shape. (e.g of patterns: Christmas Tree, Smiley, Sun, Love, Car and so on)

80 ball

80 ball bingo was developed straight for the online environment and has earned its niche of players looking for a game with a unique twist to the bingo types. It is faster than the 90 ball type and more innovative than the 75 ball bingo.

The ticket is made up of 16 squares, which are arranged on a 4 X 4 grid. These are arranged in 4 columns and 4 rows. The first column contains the numbers from 1 to 20, second column - 21 to 40, third column - 41 to 59 and forth column – 60 to 80.

This bingo type gives up to 3 chances of winning, with patterns ranging from: Any Line, Any 2 Lines, Any 3 Lines, Full House, Any Vertical Line, Any Horizontal Line, Any Diagonal Line, Any 2 Columns, Any 3 Columns, Four Corners, Four Middle Squares.

50 ball

50 ball bingo is coming from the latest need to diversify the bingo types which are played in the online bingo halls.

The ticket is made up of 10 squares, which are arranged on a 2 X 5 grid. These are arranged in 2 rows and 5 columns. In the 50 Ball Bingo game, a strip is a group of 5 tickets. The first column in a strip will contain the numbers 1 to 10, the second column 11 to 20, third column 21 to 30, fourth column 31 to 40 and the fifth column 41 to 50.

This bingo type gives the players two chances of winning: One Line and Full House.

30 ball

30 ball bingo or Speed Bingo is the rapid, quick-fire bingo type that is taking the community by the storm. Fast paced and fun-filled, it's perfect for the players who want a bit more thrill.

The ticket is made up of 9 squares, which are arranged on a 3 X 3 grid. These are arranged in 3 rows and 3 columns. The first column will contain the numbers from 1 to 10, the second from 11 to 20 and the third from 21 to 30.

The win condition is to complete the Full House.

Prizes

Each game has a Game Pot, which is the prize the player plays for when participating in a game. Depending on the bingo type and/or configuration set by the House, each game can have a maximum of 5 game pots, each played against the pattern needed to be matched with the numbers on the purchased tickets. The amount of the prize associated with each pattern is either a percentage from total bets from all players, or a fixed amount determined by the House, or a guaranteed amount on which a percentage from total bets from all players is added.

Besides the Game Pot, some games can have extra prizes, usually of a large value, for the winner of the game, if game was won in a certain number of calls, known as Progressive Jackpots and Fixed Jackpots.

With Progressive Jackpots, if the Jackpot is not won, this value grows over time by taking a percentage from player's ticket cost and adding it to the Jackpot pool. The Jackpot is won when a player wins the game in a certain number of calls. (e.g. call 32 means that if player wins the game in 32 calls or less, he will win the game, thus the Game Pot, and also the Jackpot).

With Fixed Jackpots, the value is always the same, guaranteed.

Additionally, some games can feature Community Progressive and Fixed Jackpots, where a percentage will be awarded to the Jackpot winner, while another percentage will be awarded to all other players who bought tickets into the game, shared either equally, or proportionally to the tickets purchased.

Chat, Mini-games and Other Features

While playing bingo, players can chat with active fellow bingo players at the same time. Usually, there is a Chat Moderator in the Chat room - a person who moderates, entertains, holds chat games and handles promotional announcements.

Also, players can simultaneously play a mini-game of their choice, as a side bet which can bring extra prizes.

Players can decide what features take up more room on the screen based on their interest. Chat can be expanded and allow more chat history to be seen, or completely collapsed and out of sight. Alternatively, the mini-game can be brought in focus by enlarging it on top of the bingo game.

Players can also play multiple bingo games at the same time, by joining up to 3 different rooms and being able to switch between them in one click/tap.

Terms and Conditions:

Terms and Conditions

These Terms and Conditions ("Game Rules") govern Player's use of the Bingo Product & correlated services. By using the Bingo Product, the Player agrees to these terms of use in full. If the Player does not agree to these Terms and Conditions, the Player may not use the Bingo Product.

General Bingo Rules

1. The Company reserves the right to modify, add or remove any content or functionality as part of the Bingo Game, with or without prior notice to the Players, complying with applicable laws, regulations or regulatory guidance. It is Player's responsibility to ensure that at all times Player complies with all laws and regulations in any jurisdiction where Player is located or is resident of, and that Player have complete and unrestricted legal right to use the Service, and to register and participate in the Games.

2. When the bingo Room is open, the duration of each Bingo Game can differ from each other, depending on time allowed for purchase, number of game parts, game type and patterns in play.

3. Player can view the records of the games he/she has played by clicking on 'Game History' in the Menu of the Game Client. This tool shows the Player details of what he/she spent, what cards he/she played, and the outcome of each Game.

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Tickets

4. Player must have money in his/her Balance to buy Bingo Tickets/Cards, unless Games are free of charge (0 ticket cost), in which case each Player will receive the same number of Free Tickets per Game.

5. There is a limit of maximum tickets a Player can buy per game, and is subject to configuration done by the House.

6. Games can offer different purchase modes, as configured by the House:

   a) Per Card/Ticket – Players can purchase from 1 to a maximum number of tickets, and not exceeding the maximum allowed by the system. The purchase is done for each individual ticket.

   b) Per Pack - A Pack is a group of tickets. Each Player can buy only 1 Pack/Game and cannot buy single tickets from the Pack. The tickets will be pre-filled with random numbers from 1 to 30, 50, 75, 80 or 90, depending on the game type. There can be duplicate numbers inside a Pack.

7. On 80 and 90 ball games, the numbers on groups of 5 and 6 cards are usually unique and are arranged sequentially across the 5/6 cards, but not mandatory.

8. All ticket sales are final. Refunds will not be issued, unless the Game in question has been canceled by the House or does not play for whatever reason.

Prizes

9. Single-part Games contain one pattern that needs to be won and offers one prize.

10. Multi-part Games contain more than 1 pattern that needs to be won, and each pattern won offers a prize. On Multi-part Games, the Winner(s) are credited at the end of the round.

11. Where there's more than one Winner, the Prize will be shared equally between the multiple Winners.

12. The RTP (Return to Player) is an average percentage of total Wins over total Bets over a significant number of Game plays. Each game has a Theoretical RTP value, and an Actual RTP value. The Teoretical RTP is the value percentage expected to pay back in payout based on an extended (million) amount of wagers gambled on that game. The Actual RTP is also expressed as a percentage and shows the actual RTP of a particular game or player in a given period of time. The Actual RTP will often be significantly different from the theoretical number, but will even out in the long run, as an indication that the game is played out fairly.
    RTP is a measure of return to all the players of the game, not the return to any one player. As such, acceptance of these terms implies that Player is aware that the advertised RTP might be higher than the actual RTP. The minimum RTP for a bingo game is 70%.

13. A Game can have a Variable Prize, and/or a Fixed Prize and/or a Guaranteed Variable Prize. The Variable prize starts from 0 (zero) amount, then grows according to total wager for that game, and pays out according to the defined RTP (%). The Fixed Prize value is set by the House, does not grow with wager and has a maximum limit of total number of cards/strips available to be bought by all players for that game. The Guaranteed Variable Prize has a guaranteed fixed prize set by the house, on which the total wager for that game is added up according to the defined RTP (%). Each part in a Multi-part game can have any types of prizes. Certain jurisdiction might allow only certain types of prizes. The Company assumes responsibility to offer only the allowed types according to each jurisdiction.

14. Some games might have certain conditions to be met, in order to start playing:

    a) Minimum number of purchased tickets - used on Variable-prized games, it requires that the value set by the House to be equal or higher than the number of tickets purchased for that game;

    b) Minimum number of players - used on any type of game, it requires that the value set by the House to be equal or higher than the number of players who purchased tickets for that game.

Types of Jackpots

15. Some games offer extra prizes besides the game pot. There are four (4) types of Jackpots: Progressive Jackpot (PJP), Fixed Jackpot (FJP), Community Progressive Jackpot (CPJ) and Community Fixed Jackpot (CFJ). Any game can have only one type of Jackpot linked to it.

16. A Progressive Jackpot (PJP) is a payout which increases each time the game with a Jackpot is played, but the jackpot is not won. With each purchase of cards, a contribution % from the total wager is added to the Jackpot amount. The Progressive Jackpot can start from $0 amount or can have a seed amount on which the contribution % adds up. Player is eligible to win the PJP if the game is linked to the jackpot, he/she purchased the minimum number of tickets for the game and he/she won the bingo game on the required pattern in the set number of calls.

17. A Fixed Jackpot (FJP) is a payout which has a fixed value that is not influenced by the wager. Player is eligible to win the FJP if the game is linked to the jackpot, he/she purchased the minimum number of tickets for the game and he/she won the bingo game on the required pattern in the set number of calls.

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18. A Community Progressive Jackpot (CPJ) is a payout which, like the PJP, increases with each game and wager, and which has two prizes: one for the winner(s) of the Jackpot, who wins the bingo game on the required pattern in the set number of calls, and the Community share. By "Community" it is understood that all players who have purchased at least one (1) ticket on the game on which the Jackpot was triggered, will get a share of the Community prize. As such, the CPJ amount is the sum of Winner prize and the Community Share. The Community Share could either be Equal, or Proportional. If Equal, all players who participated in the winning Jackpot game will get an equal share of the total Community Share. If Proportional, all participants will get a share of the Community Share proportional to the number of tickets each player has bought. Free tickets will count towards the eligibility of winning a share of the jackpot. When the progressive jackpot is won, the jackpot for the next play is reset to a predetermined value, and resumes increasing under the same rule. Ticket share value and Prize per player from the Community share to be rounded up to the full cent/penny. Any difference from the rounding up gets added to the Community share, by increasing the Jackpot value.

19. A Community Fixed Jackpot (CFJ) is a payout which, like the FJP, has a fixed value that is not influenced by the wager, and which has two prizes: one for the Jackpot winner(s), and one for the participants. The Community Share could either be Equal, or Proportional. If Equal, all players who participated in the winning Jackpot game will get an equal share of the total Community Share. If Proportional, all participants will get a share of the Community Share proportional to the number of tickets each player has bought. Free tickets will count towards the eligibility of winning a share of the jackpot. When the progressive jackpot is won, the jackpot for the next play is reset to a predetermined value, and resumes increasing under the same rule. Ticket share value and Prize per player from the Community share to be rounded up to the full cent/penny. Any difference from the rounding up gets added to the Community share, by increasing the Jackpot value.

20. When won, any type of Jackpot is awarded instantly to the Player's account.

21. If two or more eligible Players won any type of Jackpot, the Jackpot amount is equally split between all winners.

Pre-Order tickets

22. Bingo tickets might be available for pre-order in advance, either on the Website and/or in the Bingo Product. Participation of the Player in the Bingo Room at the scheduled time is not mandatory for the pre-bought tickets to play in that Game.

23. Pre-ordered games withdraw funds from your account at time of purchase.

24. All bingo ticket sales are final. When pre-ordering tickets with a Progressive Jackpot attached, Player is aware that the Progressive Jackpot can be won before the pre-ordered game plays out, in which case the game will continue to play with a new Jackpot linked to it, which might have a different value than the one initially advertised.

25. The player understands and acknowledges that The Company has the right to cancel pre-orders for any reason, in which case the Player's pre-ordered tickets will be canceled and refunded back to Player's balance account. The contribution from those tickets that were added to the Jackpot value will be removed, and the Jackpot value will be updated.

Promotions

26. Some games might offer Promo Tickets, "Buy X Get Y Free", where players get a certain number of free tickets upon purchase of a certain number of normal tickets. Promotional Tickets have the same chance of winning a prize as normal tickets. Promotional Tickets can only be used in the game that they are offered.

27. Certain players might receive Free Tickets that can be used to play a game of an equal ticket cost. There might be restrictions on the games free tickets can be played in, as decided by the House. **Free cards cannot be claimed on Promo Tickets**. Free tickets have an expiry date and cannot be used later than this date. Free Tickets have the same chance of winning a prize as normal tickets.

28. Some games might be free-of-charge (0 ticket cost), in which case Players who enter the room where the game is hosted, before it starts to play, will receive the same amount of free tickets, and be put in play. Free Tickets received on a free-of-charge game can only be used in the game that they are offered.

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28. Some games might be free-of-charge (0 ticket cost), in which case Players who enter the room where the game is hosted, before it starts to play, will receive the same amount of free tickets, and be put in play. Free Tickets received on a free-of-charge game can only be used in the game that they are offered.

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f) Player must not use an offensive nickname/chat name, and/or that contain obscenities or promotes any brand, website or URL;

g) Player must not make any statements or submit any material that is sexually explicit or offensive, including, but not limited to, messages that are expressions of bigotry, racism, hatred, prejudice or profanity;

h) Player must not make statements or submit any material that is abusive, defamatory or harassing or insulting to other Players;

i) Player must not distribute viruses, malware or any other technology that may harm the Bingo Product, Website or any Player;

j) Player must not make statements or submit any material that advertises, promotes any company or product, discusses illegal activities, or post personal details;

k) Player must not make statements or submit any material about the Company or service connected to the Company that is untrue and/or malicious and/or damaging to the Company;

l) Player must not post any content that he/she does not have the right to post;

m) Player must not user another player's account to play the game, or solicit funds from any other players;

n) Player must not willingly spam the chat room by repeating the same message;

o) Player must not type in CAPITAL LETTERS as this is considered to be an aggressive tone/ shouting;

p) Player must not use the chat room to make complaints.

31. The Company reserves the right to delete any messages in the Chat room that the Company considers unsuitable or do not comply with the rules above.

32. The Company may mute or suspend the Player's ability to use the Chat facility if the Company considers that the content the Player posts on the Chat facility is unsuitable. It's human to make mistakes. Therefore, for the first wrongdoing the player will receive a public warning in the chat. They will be invited to consult this page as a reminder and will be asked not to repeat their actions. If a further wrongdoing occurs, the player will be temporarily banned from the room. Depending on the seriousness, the player may be permanently blocked from the chat room. If a player makes continuous or serious breaches they will be banned from all chat. Complaints can be better handled in the form of a direct email to our Chat Manager. Explain your concerns here and we will do our best to respond quickly chat.manager@pragmaticplay.com.

33. If any communications or content posted on the Chat feature makes the Player feel threatened or abused, or if the Player believes that such communications or content is offensive or otherwise breaches these Chat Rules, please contact Customer Support team.

34. The views and opinions expressed in the Chat Room do not reflect those of the Company's employees. Player agrees that the Company will be indemnified, defended and held harmless from any and all losses, liabilities, claims, damages resulting from the Player's use of the Chat Room.

35. The Chat Moderator (CM) makes sure that Players have fun in a safe environment, by chatting with the players, playing chat games and ensuring everyone has the best game and social experience. CMs do not handle account queries, nor do they perform any type of credit or refund on the Player's account.

36. Chat Games are side Games a Chat Moderator holds during a Bingo Game. Chat Games can be played only by Players who purchased a minimum required amount of Bingo Cards for the Game, and will hand out prizes to Players who comply with the requirements of the Game and whose account status is eligible to receive these additional prizes. For more information, visit the Website or contact Customer Support.

Interrupted Gaming Policy

37. If Player loses internet connection at any time during play, the Game will carry on and any Winnings will be automatically credited to the Player's account.

38. The Company is not liable for any failure of IT software and hardware due to the operation of the equipment, used by the Player or other users, as well as for the Player or other players' Internet provider failures.

Privacy Rules

39. By starting to play, the Player gives consent that the Bingo provider can collect and process some personal data related to the Player: IP address; nickname, Chat history.

40. Player acknowledges and accepts that his/her communications in Chat are not private or confidential and may be viewed by others accessing the Bingo Game.

41. The Company keeps Chat history for 30 days. After period expires, we erase all data history from our systems. If Player decides to have his/her data removed earlier from our system, or have any other privacy questions, please send us an e-mail at privacy@pragmaticplay.com.

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Copyright and Trademarks

42. The terms PragmaticPlay LTD and any other marks are the trade marks, service marks and/or trade names of the Group or one of its subsidiaries or associated companies or its licensors. Further, all other material used by Group, including but not limited to the software, images, pictures, graphics, photographs, animations, videos, music, audio, text (and any intellectual property rights in and to any of the same) is owned by the Group or one of its subsidiaries or associated group companies and/or licensors and is protected by copyright and/or other intellectual property rights. You obtain no rights in such copyright material or trade or service marks and must not use them without the Group's written permission.

43. The emoji icons used in the Chat Room are property of ©2019 JoyPixels Inc.

4.3 Payouts

The following payouts have been verified through functional testing:

Bingo 90 Fixed

GAME ID: #99068324

Name	Pot	Pattern
One line	£ 2.00	
Two lines	£ 3.00	
Full house	£ 5.00	

Community Fixed Jackpot details	
Prize	£ 300.00
Winner	£ 0.00
Community	£ 300.00
Won in Call	70 Calls
Part	3

Bingo 90 Variable

GAME ID: #99068325

Name	Pot	Pattern
One line	£ 0.00	
Two lines	£ 0.00	
Full house	£ 0.00	

Community Progressive Jackpot details	
Prize	£ 500.00
Winner	£ 250.00
Community	£ 250.00
Won in Call	65 Calls
Part	3
Initial Seed	£ 500.00
Re-Seed	£ 500.00
Contribution	1 %

4.4 Return to Player

The statistical return to player (RTP) for PragmaticPlay's game Bingo 90 is 70.00%.

5 References

1. *Remote Gaming Regulations 2004, Legal Notice 176 of 2004 of the Lotteries and other Games Act (ACT XXIV OF 2001), Published on the 20th April 2004, No Revisions.*
2. *RNG Report "2016PPL002RNG246 - PragmaticPlay RNG.pdf ", issue date 12 September 2016.*
3. *Game specification "PGW Bingo Game design specification doc - PragmaticPlay.pdf", no version, no date.*
4. *Game Simulation "Simulation for GA (rtp70).xlsx", no version, no date.*
5. *RTP Management Policy "Pragmatic Play_Bingo_RTP Management Policy.pdf", no version, no date.*
6. *Change log "Change log - GTD and Community.doc", no version, no date.*

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Annex A : SHA-1 Hashes

Game server:

49237840fd9d449ff2bc1bdb59b4b70de13db51522d79fad10632ba8cedf772365390a1db44f04b14da06e32b7d31ef25dcda0a2bbdbaec2c8ec295bd75a21e6 **bingo-core-logic-1.2.4.4.jar*

e0b2108733adf8e8e75006ae6dc730e573f66b78 **bingo-jackpot-logic-1.2.jar*

RNG:

b33e33da96c37c0eb2d02b3fbf439685fcda876c **mg.jar (*):*

End of Document

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