

Certification Report.	Singular Licence (Game – Spaceman)- Final Functionality Certification Report
Report Identification	PPL-ES-220616-01-GC-R1
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Manufacturer	Pragmatic Play Ltd
Type Of Games	Crash-Type Game
Report prepared for	Pragmatic Play Ltd Block E, Falcon House, Main Street, Sliema - SLM 1544 Malta
Jurisdiction	Spain National Online

Gaming Associates

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 Pragmatic Play Ltd and the Directorate General of Gaming to advise the Final Functionality certification of Pragmatic Play Ltd game "Spaceman", against the Resolution of the Directorate General of Gaming of 6 October, 2014 (Official State Gazette No. 246 of 10 October, 2014) extending the development and specification of technical requirements established in Gambling Act 13/2011, of 27 May, and Royal Decree 1613/2011, of 14 November.

The documents are copyright.

1.2 Disclaimer

ga has reported on what it has discovered through evaluation of the game Spaceman.

2 Administration

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2.2 Version

Version	Description	Date
V0.1	Initial Draft – MHAS	2022-06-10
V0.2	Reviewed and Updated – WKAS	2022-06-13
V0.3	QA – UVAS	2022-06-14
V1.0	Final Report to Pragmatic Play Ltd	2022-06-16

3 Description of the system being certified

Pragmatic Play Ltd game is not deployed on any gaming platform or gaming servers at the time of evaluation. Therefore, gaming platform related requirements are out of scope and operator will be responsible for meeting these requirements.

3.1 The gaming system is installed in the following data centres:

Not Applicable

3.2 The following table provides details of gaming software components:

Game	RTP%	Fingerprint SHA1	File names
Spaceman	95.50%	d060b63b5707666ce67386eb89e95c311bfa2ebf	SpaceManRNGObject.class
		868735fd0446e6f561c41aaa9328d1cfcc8bf23d	SpacemanSecondLevelRngConfiguration
		8db017e2163384ef1a8aefceacbb72f4af5f8bc3	SpacemanFirstLevelRngConfiguration
		f7ff44c528a4c6f22a90e936cc299c497045d6b3	ResultCodeVO.class
		1e0c535c5357f06538b84b936aa34670d86bb931	BetCodeVO.class

3.3 Certified websites and trade names:

Not Applicable

3.4 Role of the operator:

Pragmatic Play Ltd is a B2B games provider and games will be deployed on the operator's gaming Platform. Therefore, gaming platform related requirements are out of scope and operator will be responsible for meeting these requirements.

3.5 The game offer under the scope of certification, indicating certified game variants:

Game Name	Variant	Advertised Game Name	Mode
Spaceman	Crash Type	Spaceman	HTML5

3.6 Certified technical gaming access system technologies:

HTML5: Supports Desktop and Mobile browsers

4 Executive summary of the functionality certification

4.1 Overall functionality assessment

Overall functionality assessment	Compliant
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4.2 Table summarising compliance with technical requirements

The following table summarises the status of compliance of the single licence slot machine game with technical requirements. The details are provided in section 4 of the report.

4.2.1 Technical requirements for all single licences

Area	Number of requirements	Number of requirements in compliance	Number of requirements not in compliance	Number of not applicable requirements
Percentage return and prize tables	15	7	0	8
Random number generator	5	4	0	1
Game logic	17	10	0	7
Records and traceability	3	1	0	2
Terminals and user session	17	3	0	14
Communication channels	5	0	0	5
Free play applications	1	0	0	1
Graphical interface	10	5	0	5
Response to technical errors	4	1	0	3
Auto-play	5	4	0	1
Replay	1	1	0	0
"Live" games	1	0	0	1
Miscellaneous functionalities	6	0	0	6
Progressive jackpots	1	0	0	1
Internal control system	7	0	0	7

4.2.2 Technical requirements for single licence slot machine game

Not Applicable for crash type game.

4.3 Table summarising specific analyses

The following tables provide a summary of the specific analysis performed as part of the compliance evaluation. Details are provided in section 5.

4.3.1 Identity and prohibition check analysis

Not Applicable for singular licences

4.3.2 Random number generator analysis

Refer to the report "2017PPL024RNG385_1 - PragmaticPlay RNG - Spanish.pdf"

4.3.3 Analysis of the percentage return to player

Game Name	RTP Published	Actual RTP (calculated from simulated game results)
Spaceman	95.50%	95.50%

4.3.4 Analysis of the game logic and random events

Compliance with game specific rules	Compliant
Risk management system for betting counterpart	Not applicable
Audit configuration changes using parameters of the risk management system of betting counterpart	Not applicable
Audit of changes made by the operator's staff on bets	Not applicable
List of random events	Not applicable
Audit of configuration changes using parameters of game logic	Not applicable

4.3.5 Measures against fraud and money laundering

Not applicable

4.4 Table summarising integration tests

The following table provides a summary of the compliance status of integration tests performed as part of the compliance evaluation. Details are provided in section 6.

Area and requirement	Assessment
<u>B.1 Games offered</u>	
B.1.1. Games and game variants offered	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)
B.1.2 Conduct of game and correct accounting	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)
B.1.3 Participation log for channels other than internet.	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)
<u>B.2 Financial limits on participation</u>	
B.2.1 Financial limits on participation	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)
<u>B.3. Response to technical errors</u>	
B.3.1 Loss of communication with the client	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)
B.3.2 Client error	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)
<u>B.4. Internal control system</u>	
B.4.1 Integrity of ICS data	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)
B.4.2 XSD of the ICS.	Not Applicable (Pragmatic Play is a manufacturer of games. Integration is the responsibility of operator.)

5 Details of Compliance with technical requirements

The following table provides the compliance status of technical functionality requirements.

5.1 Technical Requirements for all single licences

Requirement area and reference	Assessment	Observations and Evidence
Area: Percentage return and prize tables		
RES_TEC Annex I. 3.1		
3.1 Basic game regulations. The operator will offer games and types of gambling according to its authorised titles and the basic regulations of each game.	Compliant	The game is offered according to its authorised title and basic game regulation. All other requirements that are not complied are operator's responsibility.
Operators will implement the necessary procedures into their gambling system, to fulfil the requirements established in each game's basic regulations and the ones established in the relevant Ministerial Order, to particularly include requirements on the following: <ul style="list-style-type: none"> • Specific rules of the game. • Participant claims. • Duties to inform participants. • Promotion of games. • Channels and means of participation. • Objective of the game. • Participation in the game and limits on participation. • Development of the game, determination and allocation of prizes. • Confirmation of bets or plays and cancellation and deferral of events. • Payment of prizes. 	Compliant	The game is offered according to its authorised title and basic game regulation. All other requirements that are not complied are operator's responsibility.
The operator will implement a procedure, which it will execute at least once a month, whereby it will verify that its range of games conforms to the authorised titles it holds, that the types and alternatives in each type of game conform to applicable regulations at all times, and that validated software versions are being used.	Not Applicable	Operators Responsibility
The operator will save a record of all active games at all times, indicating the game, type or alternative, if applicable, commercial name and validated version.	Not Applicable	Operators Responsibility
RES_TEC Annex I. 3.3		
3.3 Percentage return to player. For each game, type or alternative, the operator will determine the expected theoretical return to player value or range of values.	Compliant	
The operator will implement a procedure to guarantee adequate operation of each expected return to player, used at least each month to verify that the return to player percentage obtained for each game, type or alternative, reflects the expected value or ranges.	Not Applicable	Operators Responsibility
If serious differences are detected, the operator will deactivate the affected games, types or alternatives, until the incident is determined and remedied. If irregular operation is confirmed, the operator will inform the Directorate General of Gaming, indicating the cause, period of time, players and amounts affected, as well as the measures adopted.	Not Applicable	Operators Responsibility
In any games where the percentage return may depend on configurable parameters in the technical system, e.g. prize tables, the operator will keep a record of any change in these parameters.	Not Applicable	Operators Responsibility
RES_TEC Annex I. 3.4		
3.4 Prize tables. The prize tables, in those games in which they exist will be public and accessible to all participants and will include all possible winning combinations and a corresponding description for prize combination.	Compliant	All sufficient information is provided in the online game rules. Refer to document: "PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf"

Requirement area and reference	Assessment	Observations and Evidence
The prize programme information will clearly indicate whether the prizes are quantified in account units, currency or some other units.	Compliant	Winnings are clearly specified in the Euro currency. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
The prize programme information will reflect any change in prize value that may occur during the game. For this purpose, it is required that the operator has a frame displayed in a prominent place in the game's graphic interface, showing these changes in the prize value.	Not Applicable	There are no changes that occur in the prize values during game play.
When there are jackpots or prize multipliers displayed on the screens, it should be specified whether the jackpot or the multiplier affects the prize programme or not.	Not Applicable	The game is not jackpot linked.
The operator shall keep records of the prize tables for each game, so that these changes may be audited.	Compliant	Pragmatic Play Ltd keeps a record of the prized table but it is the s Operator's Responsibility to keep a complete record of the prize table.
The prize tables may not be changed during the game, except in those cases in which this fact is provided in the particular rules and the participant is adequately informed.	N/A	
Area: <u>Random Number Generator</u>		
RES_TEC Annex I. 3.5.1		
3.5.1 Operation of the RNG.	Compliant	Consult: "2017PPL024RNG385_1 - PragmaticPlay RNG - Spanish.pdf"
RES_TEC Annex I. 3.5.2		
3.5.2 Scaling methods.	Compliant	Consult: "2017PPL024RNG385_1 - PragmaticPlay RNG - Spanish.pdf"
RES_TEC Annex I. 3.5.3		
3.5.3 RNG Hardware.	Not Applicable	
RES_TEC Annex I. 3.5.4		
3.5.4 RNG Faults.	Compliant	Consult: "2017PPL024RNG385_1 - PragmaticPlay RNG - Spanish.pdf"
RES_TEC Annex I. 3.5.5		
3.5.5 RNG reseeding.	Compliant	Consult: "2017PPL024RNG385_1 - PragmaticPlay RNG - Spanish.pdf"
Area: <u>Game Logic</u>		
RES_TEC Annex I. 3.6.1		
3.6.1 Logic independent of the user terminal. All functions and logic that are critical to the implementation of the game rules and the determination of results must be generated by the Central Gaming Unit, independently of the user terminal.	Compliant	All game logic and rules implementation is independent of the player's terminal; both in download and no download games.
RES_TEC Annex I. 3.6.2		
3.6.2 Application of the RNG in games. The range of values from the RNG must be precise and not distort the percentage return to player.	Compliant	Refer to document: "2017PPL024RNG385_1 - PragmaticPlay RNG - Spanish.pdf"
The method of translation of symbols or game results should not be influenced or controlled by factors other than the numerical values derived from the RNG.	Compliant	The game does not give the player a false perception of having control over the game. The game results are based on random numbers generated by the RNG.

Requirement area and reference	Assessment	Observations and Evidence
Random events should be governed exclusively by the random number generator and must not have any correlation with other events in the game or any events within previous games.	Compliant	As shown by the statistical tests, random numbers generated by the RNG are statistically random and independent. Therefore, the game's random events have no correlation between the games played.
The game should not discard any random event, except in cases where this circumstance is provided for in the rules of the game.	Compliant	The game does not discard any random event.
The game must not manipulate random events, either manually or automatically, to maintain a minimum percentage return to player.	Compliant	Refer to document: "2017PPL024RNG385_1 - PragmaticPlay RNG - Spanish.pdf"
When the game is required to navigate around a sequence of random events (for example, cards from a deck), the events will not be re-sequenced during the course of the game, except in those circumstances referred to in the rules of the game.	Not Applicable	
RES_TEC Annex I. 3.6.3		
3.6.3 Control of game logic. The game should be designed to minimize the risk of manipulation. The necessary technicalities should be adapted, and it should implement the organizational and procedural issues that prevent behaviours that involve deviations from the rules of the game.	Compliant	The game behaves according to the online game rules. The game cannot be manipulated by the player or any player terminal.
The operator shall have a documented procedure that describes the measures taken on their system to ensure that: <ul style="list-style-type: none"> • The game is played according to rules. 	Compliant	The game is played according to the online game rules
<ul style="list-style-type: none"> • The game data is recorded in the system. 	Compliant	keeps a record of the prized table but it is the s Operator's Responsibility to keep a complete record of the prize table. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
<ul style="list-style-type: none"> • All receipts or documents identifying a bet or participation are protected against possible manipulation. 	Not Applicable	Operators Responsibility.
<ul style="list-style-type: none"> • The system monitors the time of participation or when bets are placed. The time when betting is closed must be established in rules governing the game and in any case must be earlier than the event that determines the result of the game. 	Not Applicable	Operators Responsibility.
<ul style="list-style-type: none"> • The system controls how the prize fund is established. 	N/A	
<ul style="list-style-type: none"> • The procedure for determination of winners is working properly and does not allow the entry of winners which are not eligible to be awarded, nor to accept as winners those which do not Compliant. 	Not Applicable	Operators Responsibility.
<ul style="list-style-type: none"> • The system only awards prizes to the participants listed as winners. 	Not Applicable	Operators Responsibility.
<ul style="list-style-type: none"> • Any type of transaction that may be created during the operation of the game, including those dedicated to exception handling, changes in system parameters, cancellations and manual actions will be entered into the system, along with the relevant audit trail. 	Not Applicable	Operators Responsibility.
Any modification, alteration or deletion of data must leave an audit trail, particularly where there is manual intervention.	Not Applicable	Operators Responsibility.
Area: Records and traceability		
RD_TEC Article 4.1. a) and c)		
Article 4: Central gaming unit requirements. 1. According to Article 16 of Act 13/2011, of 27 May, regulating gaming, licensed operators of the organisation, that operate and develop the games which are subject to the Act, shall have a Central Unit Games that will meet the specifications established by the National Gambling Commission that will allow: a) Recording of all game actions or operations performed by computers and users connected to the system, results of operations and games of chance and lotteries, prize distribution, operations on user registration and	Not Applicable	Operators Responsibility.

Requirement area and reference	Assessment	Observations and Evidence
game accounts, aggregate data and control and operational events of the gaming platform.		
c) Check at all times, if necessary, the operations performed, the participants and their results, if the nature of the game allows it, and reliably reconstruct all actions or operations through the platform.	Compliant	Pragmatic Play Ltd keep the history of the payers but its operator's responsibility to provide the complete history to player. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
RES_TEC Annex I. 6.1		
6.1 Records and traceability	Not Applicable	Operators Responsibility.
Area: <u>Terminals and user session</u>		
RES_TEC Annex I. 3.7.1		
3.7.1.1 Identification of terminals.	Not Applicable	Operators Responsibility.
3.7.1.2 Terminal functionality. The terminal will only be responsible for participant interaction and participation.	Compliant	Terminals are front end GUIs for players and are responsible for interaction between the player and gaming system.
The game logic or any element of randomness will be performed by the Central Gambling Unit independently from the terminal.	Not Applicable	Operators Responsibility.
Any operations executed by the terminal will receive a synchronous confirmation from the Central Gambling Unit in order to be considered accepted and to issue receipts confirming bets or deposits.	Not Applicable	Operators Responsibility.
All transactions made through the terminal will be recorded at the Central Gambling Unit and will be associated with a person who has been previously authenticated, either a participant or the operator, or technical personnel authorised by the operator. These entries will enable identification of any transactions executed from each terminal.	Not Applicable	Operators Responsibility.
RES_TEC Annex I. 3.7.2		
3.7.2.1 Installation of components on the user terminal.	Not Applicable	Operators Responsibility.
3.7.2.2 Disadvantage due to connection quality.	Not Applicable	Operators Responsibility.
3.7.2.3 Information on connection quality. The system will inform the participant about the unavailability of communication with the game system as soon as detected.	Compliant	When disconnection occurs an error message appears on the screen to inform the player. Refer to document: "PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf"
The game software must not be affected by the malfunction of the end devices of participants, except for the operation of procedures provided for completion of games or incomplete games.	Compliant	Games are not affected by any type of malfunction of the end devices of the players.
3.7.2.4 Reduced functionality for certain terminals.	Compliant	There are no limitations of information or functionality of the terminal and the client application that the client is using has the same information and the same behaviour on both the desktop and the mobile.
3.7.2.5 Minimum terminal resources.	Not Applicable	Operators Responsibility.
RES_TEC Annex I. 3.7.3		
3.7.3.1 Treatment of the participant's data. In order to guarantee the security and confidentiality of participant information, measures must be adopted to ensure that participant data cannot be accessed by other participants who may use the same terminal later on. The terminal will not definitively save a participant's data. If participant data is temporarily stored, the data will be deleted at the end of the session.	Not Applicable	Operators Responsibility.

Requirement area and reference	Assessment	Observations and Evidence
3.7.3.2 Physical design. The terminal will be designed to reduce the possibility of manipulation by a third party, putting the participant user at risk. These effects are considered logical attacks, which include the manipulation of software, physical attacks which include the bugging of chips or ports, attacks through communication channels, as well as combination attacks.	Not Applicable	Operators Responsibility.
3.7.3.3 Terminal integrity.	Not Applicable	Operators Responsibility.
3.7.3.4 Mobile terminals. In the case of mobile accessories of physical terminals, the terminal will include devices to enable the operator to control its location.	Not Applicable	Operators Responsibility.
“RES_TEC Annex I. 3.8.1		
3.8.1 Disconnection due to inactivity.	Not Applicable	Operators Responsibility.
RES_TEC Annex I. 3.8.2		
3.8.2 Record of user sessions.	Not Applicable	Operators Responsibility.
Area: <u>Communication channels</u>		
RD_TEC Articles 15.1 and 15.2		
Article 15. Gambling activities carried out over the internet.	Not Applicable	Operators Responsibility.
RES_TEC Annex I. 3.2		
3.2 Redirection to the “.es” domain.	Not Applicable	Operators Responsibility.
RD_TEC Article 16		
Article 16. Gaming activities carried out via mobile or fixed telephony text messaging services.	Not Applicable	Crash type games are only offered through the Internet.
RD_TEC Article 17		
Article 17. Gaming activities via voice communications services.	Not Applicable	Crash type games are only offered through the Internet.
RD_TEC Article 18		
Article 18. Gaming activities via audio visual communications.	Not Applicable	Crash type games are only offered through the Internet.
Area: <u>Free play applications</u>		
RD_LIC Sixth additional clause		
Sixth Additional Provision. Free play applications.	Not Applicable	Operators Responsibility.
Area: <u>Graphical interface</u>		
RES_TEC Annex I. 3.9.1		
3.9.1 Game details. The name of the game that the participant is playing must be clearly visible in all related screens.	Compliant	The name of the game is displayed on the game screen. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
Game instructions must be easily accessible. The graphic interface must include all information necessary for the development of the game. The function of all action buttons shown on the screen should be clear.	Compliant	Game instructions are easily accessible from the bet screen. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
The result of each play should be shown, if technically possible, instantly to the participant and maintained for a reasonable period of time.	Compliant	The game results are displayed for a reasonable length of time so that the player can see and understand the results.

Requirement area and reference	Assessment	Observations and Evidence
		Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
RES_TEC Annex I. 3.9.2		
3.9.2 Participant data. The display should show the participant's current balance at least in Euros and all bets made, individually and in total.	Compliant	The account balance, unit bets and total bets are displayed in Euros. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
RES_TEC Annex I. 3.9.3		
3.9.3 Prizes. The interface should clearly indicate whether prizes are shown in Euros or credits. There must not be different representations that can confuse the participant.	Compliant	All the prizes awarded are in Euros and it is clearly indicated on the bet screen. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
If random prizes are offered, associated with a play or bet, the participant must be informed of the maximum amount that can be obtained from the intended wager or play.	Not applicable	No random prizes are offered in this game.
The participant must be informed when the random prize amount is determined based on the play or bet amount. If the text or graphic elements announce a maximum prize, this prize should be obtainable in a single game.	Not applicable	No random prizes are offered in this game.
RES_TEC Annex I. 3.9.4		
3.9.4 Card Games.	Not applicable	The game is not a Card Game.
RES_TEC Annex I. 3.9.5		
3.9.5 Simulation of real-life elements. The games that simulate real-life elements (roulette, drums or other) should behave as similar as possible to the behaviour of these physical elements. The probability of some event in the simulation that affects the outcome of the game must be equivalent to the physical device in real life.	Not applicable	
RES_TEC Annex I. 3.9.6		
3.9.6 Third party graphical user interface.	Not Applicable	Operators Responsibility.
Area: Response to technical errors		
RES_TEC Annex I. 3.11		
3.11 Disabling a game or a user session.	Not Applicable	Operators Responsibility.
RES_TEC Annex I. 3.12		
3.12 Incomplete game. An incomplete game is one in which the result has not yet occurred or, if it occurred, the participant could not be informed of this fact. In an incomplete game, the particular rules of the game will determine the action of the platform; it may wait for the participant, cancel the game or continue with the game until it is completed. ● If the game is incomplete due to a loss of connection with the user terminal, the platform will show the incomplete game when the participant reconnects.	Not Applicable	The Game will carry on and any Winnings will be automatically credited to the Player's account. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
● The operator must have a documented procedure for managing incidents of unavailability of one, several or all components, including associated technical measures. Components must perform self-diagnostic, check critical files and check communications between the various components.	Not Applicable	Operators Responsibility.
● After recovery, the technical gambling system should proceed to address any current games affected by the interruption.	Not Applicable	Operators Responsibility.

Requirement area and reference	Assessment	Observations and Evidence
The technical system will keep a record of all service interruptions, with its onset, duration, and services affected for subsequent review.		
Area: <u>Auto-play</u>		
RES_TEC Annex I. 3.13		
3.13 Auto-play. If the system provides advice on game strategy or auto-play features, such recommendations or functionality must be truthful and ensure that the game achieves the required rate of return.	Compliant	Functionality provided for the Auto-play feature operates as stated in the online game rules. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
The system will ensure that the participant maintains control of the game when provided with auto-play functionality. The participant can control the maximum amount of automatic play, the maximum bet and the number of automatic bets. The participant may disable auto play functionality at any time.	Compliant	The player has full control of Auto-play functionality. The player is able to stop and manage the game with Auto-play at any time. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
When using the auto-play feature, the information shown on the screen (duration, graphic elements or anything else) will be the same and will have the same characteristics as when the game is not automatic. The interface will also show the number of auto plays elapsed or remaining.	Compliant	Information provided during Auto-play is the same as provided with manual play. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
The auto-play feature may not place a participant at a disadvantage, and neither the sequence of automatic games nor any strategy that is recommended to the participant will be misleading.	Compliant	The autoplay feature does not mislead the player as all the functionality provided is the same as that provided during manual play of the game. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
In the case of games involving more than one participant simultaneously, all participants must be informed and accept a participant who has established auto-play functionality.	Not Applicable	The game is not a multiplayer game.
Area: <u>Replay</u>		
RES_TEC Annex I. 3.14		
3.14 Replay. The platform must provide the participant the option to replay, showing it as a graphic reconstruction or an intelligible description that must reproduce all sets of the game that may have an impact on its development. The replay option must provide all information necessary to reconstruct the last ten games of the current user session.	Compliant	Pragmatic Play Ltd keeps the history of the last played games by participants but its operator's reasonability to display the complete history to the player. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
Area: <u>"Live" games</u>		
RES_TEC Annex I. 3.19		
3.19 "Live" Games.	Not Applicable	This game is not a "Live" game.
Area: <u>Miscellaneous functionalities</u>		
RES_TEC Annex I. 3.15		
3.15 Virtual players. 3.15.1 Virtual players provided by the operator.	Not Applicable	Virtual players are not provided by the operator.
3.15.2 Virtual players used by participants.	Not Applicable	Virtual players are not used by the participants.
RES_TEC Annex I. 3.16		
3.16 Metamorphic Games.	Not Applicable	The game is not a metamorphic game.
RES_TEC Annex I. 3.17		

Requirement area and reference	Assessment	Observations and Evidence
3.17 Participant "absent" state.	Not Applicable	The game is a single-player game.
RES_TEC Annex I. 3.18		
3.18 Multi-player Games with a Host.	Not Applicable	The game is not a multi-player game.
RES_TEC Annex I. 3.21		
3.21 Games through "pre-recorded" communication channels.	Not Applicable	This game is not conducted through a pre-recorded communication channel.
Area: Progressive jackpots		
RES_TEC Annex I. 3.20		
3.20 Jackpots, progressive jackpots and additional prizes.	Not Applicable	The game is not Jackpot Linked
Area: Internal control system		
RD_TEC Article 13		
Article 13. Internal control system.	Not Applicable	Out of Scope Operator's Responsibility.
RES_TEC Annex I. 5.1.2		
5.1.2 Data warehouse access by the Directorate General of Gaming.	Not Applicable	Out of Scope Operator's Responsibility.
RES_TEC Annex I. 5.1.3		
5.1.3 ICS Data Model	Not Applicable	Out of Scope Operator's Responsibility.
RES_TEC Annex I. 5.1.4		
5.1.4 Time source of ICS	Not Applicable	Out of Scope Operator's Responsibility.
RES_TEC Annex I. 5.1.6		
5.1.6 Performance of capturer and storage	Not Applicable	Out of Scope Operator's Responsibility.
RES_MOD Annex I. 2 and 3 (Monitoring data model)		
Annex 1 2. Functional data model.	Not Applicable	Out of Scope Operator's Responsibility.
Annex 1 3. Technical model.	Not Applicable	Out of Scope Operator's Responsibility.

5.2 Technical requirements for single licence slot machine game

Requirement area and reference	Assessment	Comments
Area: Configuration and development of the game session intended for slot machines		
OM_AZA Chapter IV. Article 12.2		
Article 12. Economic limits on participation in slot machine games.	Not Applicable	Operators Responsibility.
OM_AZA Chapter IV. Article 14		
Article 14. Development, determination and the allocation of prizes.	Not Applicable	Operators Responsibility.
RES_TEC Annex I. 2.1.14		
2.1.14 Recording the configuration of sessions for gambling on gaming machines.	Not Applicable	Operators Responsibility.
Area: Reporting obligations to participants in relation to the game session intended for slot machines		
OM_AZA Chapter III. Article 8.1.2		

Requirement area and reference	Assessment	Comments
Article 8. Gaming operators' obligations. 1.2. Provide clear, complete, accurate, updated information in Castilian Spanish to the participants in relation to at least the following matters:	Compliant	Information displayed on the bet screen is in Spanish.
i) During each session, and at any given time, the balance of the game session with a breakdown of the amounts gambled and prizes obtained, if any. This information shall be visible on the game interface from the start of the slot machine gaming session.	Not Applicable	Operators Responsibility.
ji) History of amounts gambled and prizes obtained in each slots machine gaming session, as well as the resulting balance of the above.	Not Applicable	Operators Responsibility.
OM_AZA Chapter III. Article 8.2		
Article 8. Gaming operators' obligations.	Not Applicable	Operators Responsibility.
OM_AZA Chapter IV. Article 13.2		
Article 13. Participation in the game.	Not Applicable	Operators Responsibility.
Area: Conduct of the game		
OM_AZA Chapter I. Article 2		
Article 2. Definitions. For the purpose of this basic Regulation terms used therein shall have the meaning set forth in this Article. 1. Slot machine. A game in which, in exchange for the price of a game, the user is granted a period of use with the purpose of obtaining a combination of symbols or graphic representations that, according to the specific game rules, is awarded a specific prize. Any game in which the essential elements pertain to other games that are already regulated will not be deemed a slot machine.	N/A	The game is a crash-type game.
2. Game. Each activation, with a cost for the participant, of the mechanism for determining a combination of symbols or graphic representations, including, as the case may be, the metamorphic evolutions derived from it. The game will end with the determination of the result and the allocation of the preset prize, if any.	Not Applicable	
3. Slot machine game session. The series of games played by the participant, whether on one or more slot machines, during the period of time specified by each of the connections to slot machines of the gaming operator.	Not Applicable	The game is a crash-type game.
4. Progressive jackpot. Prize pool that the gaming operator formed from the proceeds deducted from the amount of each game played.	Not Applicable	The game is not linked with Jackpot.
OM_AZA Chapter III. Article 6		
Article 6. Specific rules for slot machine games.	Not Applicable	Operators Responsibility.
OM_AZA Chapter IV. Article 11		
Article 11. Development of games. 1. Slot machine games shall be operated in accordance with the provisions of this basic Regulation, any provisions implementing these under the terms of the corresponding singular license granted and the specific rules.	Not Applicable	The game is a crash-type game.
2. When, whether through direct knowledge or a notification or complaint lodged by a third party, the Directorate General of Gaming becomes aware of the fact that a symbol or graphic representation in a game offered by an operator violates the provisions of Article 6 of Law 13/2011, regulating gaming, the Directorate General of Gaming may order its suspension and removal, without prejudice to the exercise of its sanctioning powers.	Acknowledged	
OM_AZA Chapter IV. Article 12		
Article 12. Limits to participation in slot machine games.	Not Applicable	Operators Responsibility.
OM_AZA Chapter IV. Article 13		
Article 13. Participation in the game. 1. Participation in slot machine games shall be done in the manner(s) established by the operator in its specific gaming rules, among those referred to in article 10.2 of this basic Regulation.	Not Applicable	The game is a crash-type game.

Requirement area and reference	Assessment	Comments
3. Operators shall establish in the specific rules of the game a provision for those situations where the session is unexpectedly interrupted. They shall also establish those cases in which it is appropriate to maintain or annul the amounts played as a result of these interruptions. In any event, participants shall be entitled to prizes that may have been obtained by the participants in a session or game prior to any interruption taking place. Similarly, in those cases in which a participant is disconnected during the course of a game for reasons other than compliance with the limits laid down in article 14.1, the operator must guarantee that the game takes place automatically until the combination of symbols or graphic representations is determined, and the participant shall be entitled to receive the amount payable for the winning combination.	Not Applicable	When interrupting the session and the game in progress, the game behaves according to the rules, keeping the balance for the player and reporting the process in the History.
4. The total amount corresponding to the stake in a game which, once formalised, is annulled by the operator in application of its specific rules, shall be returned or made available to participants in the manner established in said specific rules, at no additional cost or obligation to the participants.	Not Applicable	Operators Responsibility.
OM_AZA Chapter IV. Article 14		
Article 14. Development, determination and allocation of prizes. 4. Participation in slot machine games may be done manually or automatically. In manual mode, the game shall commence when the participant manually activates the mechanism for determining the resulting combination of symbols. In automatic mode, the game shall commence once this game mode has been configured. Not more than 100 games may be configured in automatic mode, and in any event, this mode may be abandoned at any time.	Compliant	This is a Crash Type of game that can be played manually and automatically. During the Manual Mode, the player needs to press Spin manually to activate the reels and determine the result of the game. During the Auto-play Mode, the player selects the number of Auto-plays displayed on the bet screen and presses the Spin button. The game automatically configures the selected number of plays, which will be played automatically until the number of Auto-plays reaches zero or the player Stops the Auto-play. The number of Auto-plays provided in the game is not more than 100. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
5. The game shall have a minimum duration of 3 seconds.	Not Applicable	
6. The resulting combination having been determined by chance, it shall be checked to see whether it matches any of the prizes pre-set by the gaming operator. If so, the participant in question shall be allocated the prize corresponding to this resulting combination.	Not Applicable	
7. Operators may only offer progressive jackpots. Under no circumstances may they offer guaranteed jackpots, defined as those that originate fully or partly from the operator's own funds or from sources other than stakes in the game.	Not Applicable	Operators Responsibility.
OM_AZA Chapter IV. Article 15		
Article 15. Payment of prizes.	Compliant	The game pays according to the online game rules. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
Area: Obligations to provide information to participants		
OM_AZA Chapter III. Article 8		
Article 8. Gaming operators' obligations. 1. Gaming operators shall: 1.1. Make public the specific rules.	Not Applicable	Operators Responsibility.
1.2. Provide clear, complete, accurate, updated information in Castilian Spanish to the participants in relation to at least the following matters:	Not Applicable	Operators Responsibility.

Requirement area and reference	Assessment	Comments
a) Identification of the gaming operator, in particular with respect to possession and validity of licenses granted by the Directorate General of Gaming, trade name, company name, registered office and, where applicable, the address of their representative in Spain.		
b) The system for dealing with complaints that the operator has implemented and referred to in the previous Article. The information shall contain at least the following: postal and e-mail addresses to which complaints can be sent, deadlines for making them, and, where appropriate, standard forms, and deadlines for notification of the decision. In addition, the operator's obligation to reply to every complaint received shall be cited. The operator shall notify the complainants of the identity of the contact person.	Not Applicable	Operators Responsibility.
c) Specific rules of the games offered and the ways of participating in them. This information shall be accurate and readily available before the start of participation and at any time during play.	Compliant	The rules are easily accessible in the game without making any bets. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
d) Responsible Gaming Policies implemented by the operator.	Not Applicable	Operators Responsibility.
e) Mathematical forecast of the game return, calculated on the basis of one year, together with the actual percentage return of prizes in relation to the amount gambled for each of the games in each of the preceding six months. The prizes allocated to jackpots will be excluded from the calculation of this percentage, without prejudice to the information which the operator wishes to provide in relation to these.	Compliant	The rules of the game contain the theoretical RTP. It is the responsibility of the operator to show the RTP for the previous 6 months. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
f) Maximum and minimum amount of each game.	Compliant	
g) Mode in which each game is played, whether automatic or manual.	Compliant	The game can be played automatically and also manually. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
h) A description of the winning combinations and of the prizes allocated to each winning combination.	Compliant	All winnings are with the corresponding online game rules and rules can be accessed from the bet screen. Refer to document: PPL-ES-220616-GC-01-R1 Technical Requirement - Spaceman.pdf
k) Percentage of the amount gambled by each player which is allocated to the jackpot.	Not Applicable	The game is not Linked with the Jackpot.
The information relating to slot machine games, the name and form of presentation shall be offered in such a way that it avoids similarities with any other game or induces confusion on the part of the participant.	Not Applicable	
Area: <u>Promotion of the games</u>		
OM_AZA Chapter III. Article 9.2		
Article 9. Advertising of slot machine games.	Not Applicable	Operators Responsibility.

6 Details of specific analyses

This section provides details of specific analysis performed as part of compliance evaluation.

6.1 Analysis of identity and prohibition checks

Not Applicable for singular licences

6.2 Analysis of the random number generator

6.2.1 Empirical tests - ranges & volumes tested

Refer to the Document:

“2017PPL024RNG385_1 - PragmaticPlay RNG - English.pdf”

6.2.2 Analysis of the return to player in games

The following percentage return to player has been verified for Pragmatic Play Ltd’s slot machine games. It has also been verified that return to player and pay tables cannot be changed by the operator.

Game Name	RTP Published	Actual RTP (calculated from simulated game results)
Spaceman	95.50%	95.50%

6.3 Analysis of game logic and random events

Refer to the Document: “2017PPL024RNG385_1 - PragmaticPlay RNG - English.pdf”

6.4 Measures against fraud and money Laundering

Not applicable in the case of singular licenses.

7 Details of the integration tests

B. Single Licences

B.1. Games offered

Test reference	B.1.1
Name of test	Games and game variants offered
Test type	Functional
Description of test	<p>Access will be made from the player interface to check the gaming offer corresponding to the single licence.</p> <p>The gaming offer available shall be analysed from each of the different playing applications or terminals.</p> <p>Each game and variant offered shall be analysed checking for correspondence with the games and variants permitted in the basic regulations.</p> <p>It is not necessary to play for this test, but to analyse the information published by the operator, be it information or game rules.</p>
Expected result	<p>The result will state a list, with the following information:</p> <ul style="list-style-type: none"> - the commercial name of the games and variants found - the applications or terminals from which they are available - their correspondence with the variants in the basic regulations - the version of the particular rules assessed <p>This information shall be cross-checked against the descriptive licence questionnaire filled in by the operator.</p>
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operators Responsibility

Test reference	B.1.2
Name of test	Conduct of game and correct accounting
Test type	Functional, Traceability
Description of test	<p>The game shall be played from the user interface, checking:</p> <ul style="list-style-type: none"> - the correct accounting of bets, winnings, commissions or others - for those games in which there is operator commission, a check shall be made that commissions are calculated in accordance with the particular rules. - an attempt shall be made to stake a greater amount than the amount available in the gaming account. For certain games a check shall be made: - For bets, that it is not possible to play bets at times other than those set out in the particular rules and, in particular, after the close of betting, after the start of the event for conventional bets or the end of the event for direct bets. <p>N.B. This test shall be repeated for each of the different playing applications or terminals and for each game, game variant or mode.</p>
Expected result	<p><u>Functional</u></p> <p>Compliance in the tests described above, broken down for each variant analysed.</p> <p>It shall be checked that it is not possible to stake a greater amount than the amount available in the gaming account. Also, the version of particular rules shall be indicated.</p> <p><u>Traceability</u></p> <p>The result shall describe the tables, files or others containing the information.</p>

Test reference	B.1.2
	A judgement shall be issued over whether the gaming technical system's recording system permits the recuperation of information to explain every one of the situations, and also to totally reconstruct what happened in every game.
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operators Responsibility

Test reference	B.1.3
Name of test	Participation log for different channels other than internet.
Test type	Traceability
Description of test	If they exist, participation will be carried out via each of the non-internet channels, for example, SMS, telephone.
Expected result	<p>TRACEABILITY</p> <p>The system records and logs of each of the participation channels used shall be analysed, checking that in the case of SMS and telephone, the system stores the detail of:</p> <ul style="list-style-type: none"> - date/time of each message or call made - telephone number originating the message or call - contents of message or call
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operators Responsibility

B.2. Financial limits on participation

Test reference	B.2.1
Name of test	Financial limits on participation
Test type	Functional
Description of test	<p>The system will be checked for compliance with the financial limits, maximum stake and winnings amounts.</p> <p>For this, the certifying body shall take part in the game, attempting to exceed each of the limits described in the ministerial orders for gaming, in Annex III, section two.</p>
Expected result	Record of the tests carried out and the results obtained.
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operators Responsibility

B.3. Response to technical errors

Test reference	B.3.1
Name of test	Loss of communication with the client
Test type	Functional
Description of test	<p>Tests will be carried out consisting of starting a game and then creating a loss of communication with the central gaming unit.</p> <p>The connection shall be re-established after 1 minute, 5 minutes and 15 minutes (different time intervals).</p> <p>A check shall be made of the reaction of the system to terminate the game and its compliance with the description in the particular rules. This test shall be carried out for each of the terminals, applications or clients and for each of the games or modes offered.</p>
Expected result	Compliance with the particular rules shall be indicated.

Test reference	B.3.1
	<p>The result shall show the response observed for each terminal, application or client and for each game and mode.</p> <p>The version of particular rules analysed shall also be included.</p>
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operators Responsibility

Test reference	B.3.2
Name of test	Client error
Test type	Functional
Description of test	<p>A game shall be started and then the unplanned shut down of the client terminal shall be caused.</p> <p>The terminal shall be restarted after 1 minute, 5 minutes and 15 minutes (different time intervals).</p> <p>A check shall be made of the reaction of the system to terminate the game and its compliance with the description in the particular rules. This test shall be carried out for each of the terminals, applications or clients and for each of the games or modes offered.</p>
Expected result	<p>Compliance with the particular rules shall be indicated.</p> <p>The result shall show the response observed for each terminal, application or client and for each game and mode.</p> <p>The version of particular rules analysed shall also be included.</p>
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operators Responsibility

B.4. Internal control system

Test reference	B.4.1
Name of test	B.4.1
Test type	Structure of directories and files reported in ICS.
Description of test	Real data
Expected result	<p>This test will verify that the warehouse file structure conforms to the data model. Verifying that the necessary entries are being reported for each directory.</p> <p>Specifically reviewing:</p> <ul style="list-style-type: none"> Directory structure. <p>Reporting of relevant entries for OP and JU for specific licences covered by the certification report.</p>
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operator's Responsibility

B.4.2 XSD of the ICS.

Test reference	B.4.2
Name of test	XSD of the ICS.
Test type	Real data
Description of test	This test will verify that each one of the entries for OP and JU that are being reported conform to the XSD of the monitoring data model.
Expected result	The certifying entity will indicate:



Test reference	B.4.2
	<ul style="list-style-type: none">• Each one of the entries for the OP and JU areas reported.• Whether each one of these entries conforms to the XSD.• For each entry, the XSD version used.
Date/time of test	
Result obtained	
Assessment	Not Applicable
Comments	Operator's Responsibility

8 Description of the site, equipment and dates of certification

Testing Sites:

Testing was carried out at the following Gaming Associates (**ga**) laboratory premises:
Suite 1, 82 London Road, Leicester, LE2 0QR, United Kingdom.

Testing Period:

Testing was executed during the time period from 30 May 2022 to 09 June 2022.

Testing Equipment:

Testing was carried out using standard laptop computers. The test team involved in game testing is:

- Supervisor
Usman Vaseer
- Testers
Alina Ather

9 Description of the environments used in the tests other than that used by the operator for the development of game activity

Functionality testing has been performed as a standalone games and these games will be deployed on the operator's gaming platform.

The following URLs were used to access the games:

<https://emul.pragmaticplay.net/cgAPItest/v3/game/game>

Description of the digital media to accompany the certification report

This final certification report accompanies following evidence document in the digital format:

Folder	Description
Report	Complete final certification report
Technical Requirements	Evidence from the evaluation of technical requirements
Binaries	Software component binaries

Annex A: Regulatory requirements

The following regulatory requirement documents (regulatory texts : The Act, Royal Decrees, and Resolutions) have been referred to in the functionality certification report:

1. *Act 13/2011, of 27 May, regulating gaming (LEY_RJU).*
2. *Royal Decree 1613/2011, of 14 November, extending Act 13/2011, of 27 May, regulating gaming, regarding the technical requirements for gaming activities (RD_TEC).*
3. *Royal Decree 1614/2011, of 14 November, extending Act 13/2011, of 27 May, regulating gaming, regarding licences, permits and gaming registrations (RD_LIC).*
4. *Resolution of 18 November 2011 by the Directorate General of Gaming, approving the data model of the monitoring system for information relating to the registrations of gaming operators (RES_MOD).*
5. *Resolution of 6 October 2014 by the Directorate General of Gaming, approving the regulation extending the technical specifications for compliance of the technical gaming systems covered by the licences granted under Act 13/2011, of 27 May, regulating gaming (RES_TEC).*
6. *Resolution of 16 November, 2011 by the Directorate General of Gaming, approving the regulation extending the requirements of the operational plan referred to in Article 10.2 of Act 13/2011, of 27 May, regulating gaming (RES_OPE).*
7. *Resolution of 16 November, 2011 by the Directorate General of Gaming, which establishes, in accordance with the provisions of Article 36 of Royal Decree 1614/2011, of 14 November, extending Act 13/2011, of 27 May, regulating gaming, regarding licences, permits and gaming registrations, the test of responsible gaming and the prevention of addictive gaming behaviours (RES_TES).*
8. *Treasury Ministry Order 8135 HAP/1370/2014, of 25 July, approving the basic Regulations for slot machines (OM_AZA).*
9. *Resolution of October 31, 2018 of the General Directorate for the gaming regulation on the modification of certain resolutions on gaming activities established in law 13/2011 of May 27 on gaming regulation.*

End of document