



GLI®

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RvA Registration Number of Accreditation applicable to this Report:	
Testing	L372
Products	C577

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Report Type: Evaluation and Certification

Report Date: 18 November 2022

Issuing Laboratory: GLI Europe B.V.

Evaluating Laboratories: GLI Italy B.V. - Filiale italiana (Sede di Padova)
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35010 Villanova di Camposampiero – PD
Italy

GLI UK Gaming Ltd
Llys Helyg
Ffordd y Llyn, Parc Menai
Bangor, Gwynedd, LL57 4EZ
United Kingdom

Report Recipient: PragmaticPlay Ltd.
Block E, Falcon House,
High Street, Sliema
SLM 1544,
Malta

Jurisdiction: UK Remote

Technical Standards for Testing: Remote Gambling and Software Technical Standards (February 2021)
Testing Strategy for Compliance with Remote Gambling and Software Technical Standards February 2021

Software Supplier: PragmaticPlay Ltd.
Block E, Falcon House,
High Street, Sliema
SLM 1544,
Malta

Submitting Party/ Licensee Name: PragmaticPlay Ltd.
Block E, Falcon House,
High Street, Sliema
SLM 1544,
Malta

Product Tested: Greyhound Racing V1.0.3
Horse Racing V1.2.1
Penalty Shootout V1.2.0

Request Date: As requested per submitter's request received 24 November 2020.

Evaluation Period: 28 December 2020 / 16 April 2021

Internal Reference: MO-246-PPL-20-61, MO-246-PPL-20-62

Testing Result: Subject to the Conditions of Evaluation section of this Report:
Complies

Internal methods used reference: WI-EN-010, WI-EN-012, WI-EN-013, PC-TC-001, WIP 24, WI-EN-023, WI-EN-477, WI-EN-052, WIP-33, SOP-MA



Software Product Details

GLI tested the following games during the evaluation:

Game Type	Game Name	Version
Virtual Sports Game	1. Greyhound Racing	V1.0.3
	2. Horse Racing	V1.2.1
	3. Penalty Shootout	V1.2.0

The games were tested in an environment containing the following components:

Client-Side Details	
Delivery Mechanism:	Desktop Web-based
Delivery Mechanism Type:	HTML5
Testing Details	
Platform(s) and Version(s) Tested With:	PragmaticPlay Ltd. Virtual sports games server 1.0.0.0
Browsers and Versions Tested With:	Chrome Version 87.0.4280.88 (Official Build) (64-bit)
Operating System(s) with Version:	Microsoft Windows 10 Professional 64-bit



Software Product Details

For version-control of the files, GLI gathered the following checksums:

File Name	SHA-1 Checksum
Greyhounds Racing	
DREngine.dll	1225DA79A91BCD2E6F0FABB5F6FBDECCC95FDA27
Penalty Shootout	
PSOWoodwork.dll	56F8A672FDA81521D7D2E85D82336B3680FF4C60
Horse Racing	
FHEngine.dll	D518441E88EBB021629C23C7F305D8ABB0C3B4A4
Virtual Sports Games Server (common files)	
EngineClasses.dll	4D344A5F69B66E045BFE874094A78A85D20D9A4A
CryptoRNG.dll	C16F86A8E838113911574EEA749868E89F025299
Combinationclasses.dll	941D1844896526310C6C4B47FA9F6132E0D9CC88



Games Evaluation

Descriptions of the submitted games are given below.

1. "Greyhound Racing"

Greyhound Racing is a virtual sport game in which player can bet on 6 or 8 greyhounds before the race starts. The game has the option of Forecast and Tricast betting.

2. "Horse Racing"

Horse Racing is a virtual sport game in which player can bet on 12 horse before the race starts. The game has the option of Forecast and Tricast betting.

3. "Penalty Shootout"

Penalty Shootout is a virtual sport game in which player can bet on the result of Penalty shootout before the game starts.



Games Evaluation

GLI's Games Evaluation of the games included (but was not necessarily limited to) the following elements to the extent necessary to evaluate the game for compliance with the requirements in the standards listed on the first page:

- Submitted Documentation Review,
- Software Verification,
- Source Code Review,
- Artwork and Game Rules Review,
- Game Accounting,
- Game Error and Event Handling,
- Math Evaluation and
- Emulation Testing.

GLI has performed an independent calculation of the theoretical Percentage Return to Player (RTP%) values of the games, and the results are shown in the table below.

Game Name	Supplier's Paytable ID	In Game RTP%	Supplier's Submitted RTP%	GLI's Game RTP% ^①
Greyhound Racing	N/A	92.00% 70.89% (Each Way side bet)	92.00% 70.89% (Each Way side bet)	92.00% 70.89% (Each Way side bet)
Horse Racing	N/A	92.00% 74.63% (Each Way side bet)	92.00% 74.63% (Each Way side bet)	92.00% 74.63% (Each Way side bet)
Penalty Shootout	N/A	92.00%	92.00%	92.00%

① The number(s) listed here are representative of the mean value(s) calculated following a collection of uniform sample sizes taken over a simulation of at least 100,000,000 games played. Since the value(s) listed here fall within the expected confidence intervals surrounding the manufacturer calculated return percentage(s) it can be derived that the manufacturer value(s), also listed within this table, would be an accurate assessment of the game's expected return to player.



Conditions of Evaluation

This Revised Report replaces Evaluation Report MO-246-PPL-20-62 dated 23 April 2021

This Revised Report was issued in order to update the date for the RNG report number from 27 July 2020 to 17 July 2020

GLI's compliance evaluation of the games is subject to the following conditions:

The game uses the UK Remote RNG previously approved in Report RN-246-PPL-20-01, issued on 17 July 2020.

The digital signatures of the software files listed in this Report are expected to match those in the live environment.

GLI's compliance evaluation of the games was related only to the technical scope of work elements discussed herein. This specifically excludes any other features or functions provided by the submission not related to these elements.

While GLI has reviewed all pays and plays through a source code review, GLI has NOT fully emulated the math model. Therefore, GLI cannot guarantee the following:

- 1) That the displayed return to player (RTP) matches the actual RTP.
- 2) That the payable and results displayed to the player matches the actual payable pays.
- 3) That the game operates and interacts with the player strictly in accordance with the published game rules.

Should a more extensive verification of the payouts be required, please contact GLI for more information.

GLI has performed an evaluation only on articles 7B, 7C, 7E and 5A of the RTS based on receiving confirmation from the license holder that they comply with the guidelines of good practice as stipulated in section 6 of the "Testing strategy for compliance with remote gambling and software technical standards", titled "In-house development, testing and release - good practice."

GLI has independently confirmed the theoretical return to player (RTP) of the game mathematics model and has verified that the RNG calls, payable coding and symbol mapping have been correctly implemented in the game source code. While GLI has performed strategic emulation of the actual game to verify the highest award and bonus awards, not all game payouts were verified. Accordingly, GLI cannot guarantee that the payable and results displayed to the player correspond to the expected payouts in all cases. Should a more extensive verification of the payouts be required, please contact GLI for more information.

GLI's evaluation to the Technical Standard was limited only to the requirements applicable to the games.

GLI generated the checksums of the software and source code files using the methods stated below:

Verify+ by Kobetron™ - Verification Procedure for Files or Directories:

1. Open Verify+ by Kobetron™.
2. Select the "File" or "Directory" radio button option.
3. Select the "Browse" button and then choose the file or the top directory for which a signature is being requested.
4. Click the "Verify" button.
5. The current File/Directory being checked will be displayed in the window.
6. The program will generate the aforementioned signatures and display the results.



Conclusion

Subject to the Conditions of Evaluation, GLI has determined that the evaluated elements comply with the requirements of the applicable Technical Standard(s) of the aforementioned jurisdiction.

If you should have any questions regarding this information, please feel free to contact our office.

Sincerely,

Martin Britton
Managing Director