



RANDOMNESS EVALUATION REPORT

FOR

NG ENTERTAINMENT LTD.

SKULLS GONE WILD

HTML5-DESKTOP

1.0

CONFIDENTIAL

CERTIFICATE NUMBER: 31506NGMALM

IMPORTANT DISCLAIMER

This report is supplied on the basis that it is for the sole use of the parties listed and to whom it is addressed, and exclusively for the objectives set out herein.

No party, other than those specified, may rely on this report for any purpose whatsoever.

eGaming Compliance Services Limited ('eCOGRA') does not accept any liability or responsibility towards any third party to whom this report is shown or into whose hands it may fall.

This report should not be relied upon for any assurances in relation to third parties and/or activities which are not covered by the certifiable regulatory requirements or compliance standards of the jurisdiction, regulatory authority or compliance entity or system for whose purposes this report is stated to have been prepared. All such other parties and activities are outside the scope of this report and have therefore not been reviewed by eCOGRA.

The nature, timing and extent of testing conducted for the purpose of the certification is considered sufficient and appropriate based on the applicable certifiable regulations and professional judgement applied to the associated risk of non-compliance. The certification of compliance should not be construed to imply any warranty over the functionality, quality or performance of the subject of certification. eCOGRA reserves the right to withdraw this certificate if any non-compliances are subsequently detected by or reported to eCOGRA.

CONFIDENTIALITY NOTICE

This document is proprietary to eCOGRA and contains confidential information of commercial value to eCOGRA, the disclosure of which to third parties could adversely affect the business affairs of eCOGRA.

This information is supplied in confidence to you, on the strict condition that no part of it is disclosed to any third party, in particular to any person or organisation that may be in competition with eCOGRA without the prior written approval of eCOGRA.

TABLE OF CONTENTS

SECTION 1. GENERAL INFORMATION	4
SECTION 2. INTRODUCTION	5
SECTION 3. RNG COMPONENTS.....	6
SECTION 4. TEST RESULTS	7
SECTION 5. GAME DESCRIPTION	8
SECTION 6. PERCENTAGE RETURN TO PLAYER ('RTP')	9
SECTION 7. GAME SOFTWARE DETAILS	10
SECTION 8. REVIEW FINDINGS.....	11

SECTION 1. GENERAL INFORMATION

License Holder:	NG Entertainment Ltd. 97 Windsor Street Sliema SLM 1853 Malta
Game Name:	Skulls Gone Wild
Game Type:	Slot
Platform Type:	HTML5-Desktop
Game Version:	1.0
Applicable Technical Standards:	Licensing requirements of the Malta Gaming Authority ('MGA') Subsidiary Legislation 438.04 Remote Gaming Regulations Third Schedule, Regulation 25
Testing Laboratory:	eGaming Compliance Services Limited, trading as 'eCOGRA' 2/F Berkeley Square House Berkeley Square London W1J 6 BD United Kingdom
Test Engineers:	Joanne Johnson; Sikhumbuso Mzobe; Tyrone Rajah
Supervisor:	Filipe Alves
Request for Report:	22 January 2021
Report Date:	29 January 2021
Certificate Number:	31506NGMALM

In our opinion the game listed as tested in this report complies with the relevant sections of the licensing requirements of the Malta Gaming Authority ('MGA').

The test results obtained for NG Entertainment Ltd.'s Skulls Gone Wild HTML5-Desktop 1.0 game produced statistically acceptable random numbers that were free of any significant statistical bias or predictability.



Gary Lupton-Smith,
Technical Services Manager

SECTION 2. INTRODUCTION

eCOGRA has been appointed by NG Entertainment Ltd. to evaluate and certify the following Slot game for compliance with the relevant licensing requirements Subsidiary Legislation 438.04 Remote Gaming Regulations, Third Schedule, Regulation 25 of the Malta Gaming Authority ('MGA').

➤ **Skulls Gone Wild (1.0) - NG Entertainment Ltd.**

This certification report highlights our key findings as a result of the evaluation conducted on HTML5 Desktop, Platform Version 1.0, which is the pre-production environment which is essentially the same as the live environment. The testing was conducted on the aforementioned platform established at NG Entertainment Ltd. during the period 25 January 2021 to 29 January 2021.

Please note that this is an initial certification conducted over Skulls Gone Wild, HTML5-Desktop, 1.0 and therefore this game certificate does not supersede any previous certifications.

SECTION 3. RNG COMPONENTS

The Random Number Generator (RNG) as detailed in Section 2 and used by NG Entertainment Ltd. in their Skulls Gone Wild 1.0 product was previously certified by GLI (Refer to RNG report: 413-19-001-UK-RTS-01). The scope of eCOGRA's randomness testing was limited to testing the randomness of the game output of the Skulls Gone Wild 1.0 game.

Software Provider:	Refer to GLI RNG report: 413-19-001-UK-RTS-01
Software Provider Address:	
Product Name:	
Product Description:	
Jurisdiction:	
Jurisdiction address:	
Test entity:	
Test entity address:	
Date:	
Approval:	

SECTION 4. TEST RESULTS

Numerous recognised statistical and mathematical tests were performed on a 1,000,000 rows of sample data, provided by NG Entertainment Ltd., of the game output to verify the RNG operates in a random and fair manner. This included tests for probability (to ensure the expected number of occurrences), randomness (so that the following occurrence cannot be predicted with any degree of certainty) and uniformity (to determine that each possible outcome is equally likely over the long-term). The acceptance criteria for the statistical tests is a pass at a 95% confidence level.

SECTION 5. GAME DESCRIPTION

Skulls Gone Wild (1.0)

Game Description:

Skulls Gone Wild is a 5x3 online slot game with 10 fixed pay lines, featuring "Respins and Symbol Upgrade" Features.

Further details regarding the betting characteristics, features and detailed game rules can be found in the game instructions which can be provided upon request.

SECTION 6. PERCENTAGE RETURN TO PLAYER ('RTP')

Game Name	Theoretical RTP %	eCOGRA RTP % Recalculation
Skulls Gone Wild	96.42%	96.79%

The Theoretical RTP percentage indicated in the table above is extracted from the game documentation as provided by NG Entertainment Ltd. eCOGRA recalculated the RTP percentage by performing additional independent mathematical calculations on the output of simulation game data.

SECTION 7. GAME SOFTWARE DETAILS

The scope of the game evaluation and certification applies solely to the critical game files, game versions and associated hashes provided in the tables below:

Game Files

File Name / Identifier	Version Date	Version Number	SHA-1 Hash Sum
ConfigurationSWG	1/22/2021	1.0	47FD1674BEF4F196AE154EB66C951E3AE8B98017
skulls.php	1/22/2021	1.0	23307CF2F3780FDF29A2B8FCD4E91660059EE8C5
line_wins_handler_inc	1/20/2020	1.0	4265BFE2ACF6549D2A8C2708DDCCC26E6657D396

SECTION 8. REVIEW FINDINGS

Remote Gaming Regulations	Rating	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	
b. provide over time no more than the expected house advantage to the operator.	Not applicable	Not applicable to this game type.
2. Both the gaming and financial transactions must be congruent and secure.	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
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;	Compliant	Refer to RNG certificate: 413-19-001-UK-RTS-01
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;	Compliant	Refer to RNG certificate: 413-19-001-UK-RTS-01
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.	Compliant	Refer to RNG certificate: 413-19-001-UK-RTS-01
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	Refer to RNG certificate: 413-19-001-UK-RTS-01

Remote Gaming Regulations	Rating	Comments
Third Schedule - Regulation 25 - Technical requirement for gaming system		
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	
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	
b. restrictions on play;	Compliant	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
c. instructions on how to play, including a pay-table for all prizes and special features;	Compliant	
d. the player's current account balance;	Compliant	
e. unit and total bets permitted;	Compliant	
f. the rules of the game.	Compliant	
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.	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
8. The gaming system must:		
a. be capable of producing monthly auditable and aggregate financial statements of gaming transactions, and	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.

Remote Gaming Regulations	Rating	Comments
Third Schedule - Regulation 25 - Technical requirement for gaming system		
b. calculate accurately all taxation and other monies due to the Authority.	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
9. The gaming system must maintain information about all games played, including:		
a. the identity of the player;	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
b. the time the game began as recorded on the game's server;	Compliant	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
c. the balance on the player's account at the start of the game;	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.

Remote Gaming Regulations	Rating	Comments
Third Schedule - Regulation 25 - Technical requirement for gaming system		
d. the stakes placed in the game (time stamped by the games server);	Compliant	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
e. the game status (in progress, complete, etc.);	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
f. the result of the game (time stamped by the games server);	Compliant	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
g. the time the game ended as recorded by the games server;	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.

Remote Gaming Regulations	Rating	Comments
Third Schedule - Regulation 25 - Technical requirement for gaming system		
h. the amount won or lost by the player; and	Compliant	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
i. the balance on the player's account at the end of the game.	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
10. The gaming system must maintain information about significant events as follows:		
a. large wins;	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
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;	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.

Remote Gaming Regulations	Rating	Comments
Third Schedule - Regulation 25 - Technical requirement for gaming system		
c. changes made by the operator to game parameters.	Not applicable	The certification testing included in this report is limited to relevant game requirements that can be assessed at game supplier level. The certification testing excludes the assessment of compliance against any requirements where the game functionality or information is not directly managed by the game supplier.
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.	Not applicable	No variations identified for the product under certification.