

RANDOMNESS EVALUATION REPORT

FOR

NG ENTERTAINMENT LTD

SANTA'S WILD REELS

HTML5-DESKTOP

1.0

CONFIDENTIAL CERTIFICATE NUMBER: e2315859NTGMLTM



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TABLE OF CONTENTS

Section 1. General Information	4
Section 2. Introduction	
Section 3. RNG Components	7
Section 4. Test Results	8
Section 5. Game Description	9
Section 6. Percentage Return to Player ('RTP')	9
Section 7. Game Software Details	9
Section 8. Review Findings	10



SECTION 1. GENERAL INFORMATION

License Holder:	NG Entertainment Ltd 30/1 Kenilworth Court Sir Augustus Bartolo Street TA' Xbiex XBX 1093 Malta
Game Name:	Santa's Wild Reels
Game Type:	Casino 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:	eCOGRA Limited, trading as 'eCOGRA' 2/F Berkeley Square House Berkeley Square London W1J 6 BD United Kingdom
Test Engineers:	Tshavhungwa Mukhanu; Humbulani Nedondwe; Stephen Coombe
Supervisor:	Kabelo Williams
Request for Report:	13 November 2023
Report Date:	22 November 2023
Certificate Number:	e2315859NTGMLTM



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 Santa's Wild Reels HTML5-Desktop 1.0 game produced statistically acceptable random numbers that were free of any significant statistical bias or predictability.

Pierre Jordaan, Compliance Director



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').

Santa's Wild Reels (1.0) - NG Entertainment Ltd

This certification report highlights our key findings as a result of the evaluation conducted on HTML5-Desktop, 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 13 November 2023 to 17 November 2023.

Please note that this is an initial certification conducted over Santa's Wild Reels, 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 Santa's Wild Reels (1.0) product was previously certified by Gaming Laboratories international (Refer to RNG report: 413/19/001/UK/RTS/02). The scope of eCOGRA's randomness testing was limited to testing the randomness of the game output of the Santa's Wild Reels (1.0) game.

Software Provider:	
Software Provider Address:	
Product Name:	
Product Description:	
Jurisdiction:	
Jurisdiction address:	Refer to GLI RNG report: 413/19/001/UK/RTS/02
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

Santa's Wild Reels (1.0)

Game Description:

Santa's Wild Reels is a slot game played with 40 fixed paylines. Each game costs a minimum of 10 fixed coins. The game consist of Wild Reels Spins, Santa's Wheel, Christmas Free Spins, and a Buy Bonus Feature.

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
Santa's Wild Reels	94.00%	93.83%
	Buy Bonus Feature: 94.10%	Buy Bonus Feature: 94.22%

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
line_wins_handler.inc.php	20/01/2020	1.0	4265BFE2ACF6549D2A8C2708DDCCC26E6657D396
ConfigurationSWR.txt	N/A	1.0	E9C41168950A0C3C88E2D61DDE737B7754DAC29F



SECTION 8. REVIEW FINDINGS

Rei	mote Gaming Regulations	Rating	Comments
Thi	rd Schedule - Regulation 25 - Technical requirem	ent for gaming syste	m
1.	The gaming system must:		
	 a. faithfully follow the game rules published by the operator; and 	Compliant	
	 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 cr	iteria for randomnes	s, 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/02
	 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/02
	 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/02
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/02
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	Compliant	



Rer	note Gaming Regulations	Rating	Comments		
Thi	rd Schedule - Regulation 25 - Technical requirem	ent for gaming syste	m		
	gaming system and the playing device used by				
	the player.				
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			
	c. instructions on how to play, including	Compliant			
	a pay-table for all prizes and special				
	features;				
	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	Not applicable	The certification testing included in this		
	system must be congruent with gaming		report is limited to relevant game		
	transaction reports and conversely:		requirements that can be assessed at		
	Provided that all such reports shall be readily		game supplier level. The certification		
	and freely available to the Authority.		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:	Not applicable	The certification testing included in this		
	a. be capable of producing monthly		report is limited to relevant game		
	auditable and aggregate financial		requirements that can be assessed at		
	statements of gaming transactions, and		game supplier level. The certification		
	anu		testing excludes the assessment of compliance against any requirements		
			where the game functionality or		
			information is not directly managed by		
			the game supplier.		
	b. calculate accurately all taxation and	Not applicable	The certification testing included in this		
	other monies due to the Authority.		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 a	bout all games playe	ed, 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		



Remote Ga	ming Regulations	Rating	Comments
Third Sched	lule - Regulation 25 - Technical requirem	ent for gaming syste	m
			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 recording of the results within the gambling system are not managed by the 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.
d.	the stakes placed in the game (time stamped by the games server);	Compliant	The recording of the results within the gambling system are not managed by the 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 recording of the results within the gambling system and account functionality are not managed by the 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 Gan	ning Regulations	Rating	Comments
Third Sched	ule - Regulation 25 - Technical requirem	ent for gaming syste	m
h.	the amount won or lost by the player; and	Compliant	The recording of the results within the gambling system and account functionality are not managed by the 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 gam	ning system must maintain information a	bout significant even	its as follows:
а.	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.
с.	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.
-	riations to any of the requirements d in this Schedule shall be submitted to	Not applicable	No variations identified for the product under certification.



Remote Gaming Regulations	Rating	Comments
Third Schedule - Regulation 25 - Technical requirement for gaming system		
the Authority for its approval by notice in		
writing.		