

GAMBLING COMMISSION (GREAT BRITAIN) INDEPENDENT GAME TESTING SUMMARY REPORT

FOR

NG ENTERTAINMENT LTD
BISON GOLD, HTML5-DESKTOP, 1.0

CONFIDENTIAL
CERTIFICATE NUMBER: E238539NTGGBRM



NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

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.

eCOGRA 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.



GAMBLING COMMISSION - GAME TESTING SUMMARY REPORT NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

TABLE OF CONTENTS

Section 1. General InforeCograMT29 mation	4
SECTION 2. INTRODUCTION	6
SECTION 3. GAME DESCRIPTION	7
SECTION 4. PERCENTAGE RETURN TO PLAYER ('RTP')	8
SECTION 5. SOFTWARE DETAILS	9
Section 6. Review Findings	10
SCHEDULE 1. GAME TESTING	15
1. Tests Performed	15
2. Test Results	16



NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

SECTION 1 GENERAL INFORMATION

Test Engineers:

SECTION 1. GENERAL INFORMATION	
License Holder:	NG Entertainment Ltd 30/1 Kenilworth Court Sir Augustus Bartolo Street TA' Xbiex XBX 1093 Malta
Game Name:	Bison Gold
Game ID:	Integer: 45
Game Type:	Casino Slot
Platform Type:	HTML5-Desktop
Platform Version:	1.0
Platform Supplier:	NG Entertainment Ltd 30/1 Kenilworth Court Sir Augustus Bartolo Street TA' Xbiex XBX 1093 Malta
Channels Tested:	Desktop: Microsoft Windows 11 Pro [Version 22H2 (OS Build 22621.1702)]; Google Chrome Browser, Version 113.0.5672.93 (Official Build) (64-bit)
Scope of Testing:	Remote Gambling and Software Technical Standards ("RTS") – February 2021, limited to RTS 7A, RTS 7B, RTS 7C, RTS 7E, RTS 9B.b and RTS 9B.d (and pre-release assessable elements of RTS 3A, RTS 3B, RTS 3C, and RTS 5A).
Certification Type:	Initial pre-release testing
Sampling Used for Retesting:	N/A
Test House:	eCOGRA Limited 2/F Berkeley Square House Berkeley Square London W1J 6 BD United Kingdom
Test House Accreditation:	A UKAS accredited testing laboratory No. 4656 ISO/IEC 17025:2017, issued by the United Kingdom Accreditation Service

Collin Zondi



NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

Test Supervisor: Kabelo Williams

Request for Report: 29 June 2023

Certificate Date: 10 July 2023

Certificate Number: e238539NTGGBRM

Result of Testing: Compliant (Refer to Test Results under Schedule 1)

I hereby certify that the abovementioned game complies with the applicable requirements of RTS 7A, RTS 7B, RTS 7C, RTS 7E, RTS 9B.b and 9B.d (and pre-release assessable elements of RTS 3A, RTS 3B, RTS 3C, and RTS 5A) of the Gambling Commission's Remote Gambling and Software Technical Standards — February 2021, as described in Section 6 of this report. In addition, we have verified that the game under certification does not contain the option to purchase direct access to any features.

Pierre Jordaan

Compliance Director, eCOGRA



NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

SECTION 2. INTRODUCTION

eCOGRA has been appointed by NG Entertainment Ltd to evaluate and certify the following Slot game for compliance with the relevant Remote Gambling and Software Technical Standards – February 2021, and to highlight any exceptions identified during testing.

➤ Bison Gold (1.0)

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 29 June 2023 to 10 July 2023.

Please note that this is an initial certification conducted over Bison Gold HTML5-Desktop and therefore this game certificate does not supersede any previous certifications.



Gambling Commission - Game Testing Summary Report

NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

SECTION 3. GAME DESCRIPTION

Bison Gold (1.0)

Game Description:

Bison Gold is a 5x4 screen with 1024 ways. Each game costs 50 coins. We will put the final Bet structure once we have the Backend done at this very place.

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



Gambling Commission - Game Testing Summary Report

NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

SECTION 4. PERCENTAGE RETURN TO PLAYER ('RTP')

Game Name	Theoretical RTP %	eCOGRA RTP % Recalculation
Bison Gold	94.08%	94.12%

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.



NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

SECTION 5. 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	Version	Binary SHA#1 Hash
	Date	Number	
line_wins_handler.inc.php	N/A	N/A	4265BFE2ACF6549D2A8C2708DDCCC26E6657D396
ConfigurationBG.txt	N/A	N/A	92DDBA7F158CDB0D5036006A2E8086B189780A52

Random Number Generator

File Name / Identifier	Version Date	Version Number	Binary SHA#1 Hash
rng.lib.php	2019/06/21	php 7	850D4C84879E52C8A3F4752488A3634869052196



BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

SECTION 6. REVIEW FINDINGS

The key findings of our evaluation of the game for compliance with the relevant sections of the Remote Gambling and Software Technical Standards – February 2021, are as follows:

RTS Requirement Assessed	Related RTS Requirements Assessed	Testing Applied	Assessment	Comments
RTS 7 – Generation of random outcomes				
(Aim: To ensure that games and other virtual events	operate fairly)			
RTS requirement 7A	Not applicable.	Refer to "1. Tests	Compliant	Refer to GLI RNG report:
Random number generation and game results		Performed" under		413/19/001/UK/RTS/02
must be 'acceptably random'. Acceptably random		"Schedule 1 –		
here means that it is possible to demonstrate to a		Game Testing"		
high degree of confidence that the output of the		below.		
RNG, game, lottery and virtual event outcomes are				
random, through, for example, statistical analysis				
using generally accepted tests and methods of				
analysis. Adaptive behaviour (i.e. a compensated				
game) is not permitted.				
Where lotteries use the outcome of other events				
external to the lottery, to determine the result of				
the lottery (for example, using numbers from the				
National Lottery) the outcome must be				
unpredictable and externally verifiable.				



NG ENTERTAINMENT LTD
BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

RTS requirement 7B	RTS requirement 3A	Refer to "1. Tests	Compliant	The scope of testing for the
As far as is reasonably possible, games and events	An explanation of the applicable rules must be	Performed" under		"Related RTS Requirements"
must be implemented fairly and in accordance	easily available to the customer before they	"Schedule 1 –		did not include how game
with the rules and prevailing payouts, where	commit to gamble. The content including	Game Testing"		rules are made available to
applicable, as they are described to the customer.	artwork and text must be accurate, and	below.		players (rules easily
	sufficient to explain all of the applicable rules			accessible via hyperlinks
	and how to participate. All reasonable steps			etc). eCOGRA has performed
	must be taken to ensure that the content is			a review of the game display
	understandable			and content of player facing
				rules to ensure that they
	RTS requirement 3B			accord with the maths and
	Where relevant, as the game or event			enable players to verify
	progresses, information that may reasonably			game outcomes.
	be expected to enable the customer to			
	understand the current state must be			
	displayed.			
	RTS requirement 3C			
	For each virtual event, game (including bingo),			
	or lottery, information that may reasonably be			
	expected to enable the customer to make an			
	informed decision about his or her chances of			
	winning must be easily available before the			
	customer commits to gamble. Information			
	must include:			
	i. a description of the way the			

game works and the way in

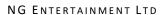


BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

		T	1	,
	which winners are determined			
	and prizes allocated;			
	ii. house edge (or margin);			
	iii. the return to player (RTP)			
	percentage; or			
	iv. the probability (likelihood) of			
	winning events occurring.			!
	RTS requirement 5A			
	All reasonable steps should be taken to ensure			
	that gambles are accepted, processed and			
	settled in accordance with the operator's			
	published terms and rules, and the rules of the			
	specific game, event, or bet.			
RTS requirement 7C	Not applicable.	Refer to "1. Tests	Compliant	Refer to Schedule 1.
Game designs or features that may reasonably be		Performed" under		
expected to mislead the customer about the		"Schedule 1 –		
likelihood of particular results occurring are not		Game Testing"		
permitted, including substituting losing events with		below.		
near-miss losing events and simulations of real				
devices that do not simulate the real probabilities of				
the device.				

eCOGRA





BISON GOLD, HTML5-DESKTOP, 1.0 CERTIFICATE NUMBER: E238539NTGGBRM

RTS requirement 7E	RTS requirement 5A	Refer to "1. Tests	Compliant	Refer to Schedule 1.
Except in the case of subscription lotteries, the	All reasonable steps should be taken to	Performed" under		
system clearly and accurately display the result of	ensure that gambles are accepted, processed	"Schedule 1 –		
the game or event and the customer's gamble. The	and settled in accordance with the operator's	Game Testing"		
result must be displayed for a length of time that	published terms and rules, and the rules of	below.		
may reasonably be expected to be sufficient for the	the specific game, event, or bet.			
customer to understand the result of the game or				
event in the context of their gamble.				

RTS 9 – Progressive jackpot systems (Aim: To ensure that progressive jackpot systems open	erate fairly)			
RTS requirement 9B.b Where a customer contributes to a jackpot pool, that customer should be eligible to win the jackpot whilst they are playing that game. The chances of winning a jackpot should increase in correlation with the amount contributed.	RTS implementation guidance 7C f. Where a customer contributes to a jackpot pool, that customer should be eligible to win the jackpot whilst they are playing that game, in accordance with the game and jackpot rules.	Refer to "1. Tests Performed" under "Schedule 1 – Game Testing" below.	Not Applicable	This game does not consist of a jackpot feature.
RTS requirement 9B.d The gambling system shall ensure that a winning customer is notified of a jackpot win immediately after it is triggered and that other participating customers are adequately notified of the jackpots reset value.	Not applicable.	Refer to "1. Tests Performed" under "Schedule 1 – Game Testing" below.	Not Applicable	This game does not consist of a jackpot feature.





BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

Feature Buy-Ins				
It shall not be possible for a player to directly access	RTS requirement 14A	Refer to "1. Tests	Compliant	The game under certification
a game feature by placing an additional wager	Gambling products must not actively	Performed" under		does not contain the option
outside of the normal course of play.	encourage customers to chase their losses,	"Schedule 1 –		to purchase direct access to
	increase their stake or increase the amount	Game Testing"		any features. Where the
	they have decided to gamble, or continue to	below.		game contains a feature that
	gamble after they have indicated that they			may be activated by an
	wish to stop.			additional wager that is
				made with winnings from
	RTS requirement 3A			the current game round (e.g.
	An explanation of the applicable rules must be			a gamble feature), this is
	easily available to the customer before they			deemed acceptable.
	commit to gamble. The content including			
	artwork and text must be accurate, and			
	sufficient to explain all of the applicable rules			
	and how to participate. All reasonable steps			
	must be taken to ensure that the content is			
	understandable			





CERTIFICATE NUMBER: E238539NTGGBRM

SCHEDULE 1. GAME TESTING

1. TESTS PERFORMED

Game design testing has included verification of the game mathematics, game artwork, the theoretical RTP and player-facing game rules. Software testing has included evaluation and verification of the software implementation of the game design aspects tested. The game software testing has been conducted on HTML5-Desktop, 1.0, on a pre-production environment which is reflective of the live environment, with verification procedures conducted over games rules and the actual RTP, using methods of simulation, emulation and manual testing, and verification of the scaling and mapping used to convert raw RNG output to game outcomes.

The game evaluation included the following tests, amongst others:

- Verification procedures over sufficiency and appropriateness of the client's internal testing conducted over the game under certification;
- Review of game documentation;
- Review of the mapping of the random inputs to game outcomes in accordance with prevailing probabilities and pay tables;
- Evaluation of the pertinent modules of the game source code for mapping of rules and RNG calling;
- Evaluation of game accounting in accordance with game pay tables;
- Inspection of game interface including artwork and graphics, and clear and correct presentation of the game rules;
- Comprehensive operational and functional client-side tests over the game mechanics to ensure that game pay tables, game rules and help files are correctly implemented in the operation of the game;
- Testing of rare outcomes through emulation to ensure that game pay outs, top prizes and jackpot features (if applicable) operate correctly;
- Review of the game design and game mathematics that determine the theoretical RTP%;
- A check on whether it is possible to place a wager outside of the base game and ordinary course of play; and if this wager directly activates a game feature outside of the ordinary course of play.
- Independent mathematical calculations of RTP% utilising complete, accurate and valid simulated game data output, to verify the theoretical RTP% as per the game mathematics documentation; and
- Game simulation (output) testing to ensure the game outcomes are randomly generated; and the actual RTP is within an acceptable range of the expected RTP.

The RNG utilised in evaluating the game output and games rules has been sufficiently and appropriately tested, in a separately issued test house summary report. Please refer to GLI RNG report 413/19/001/UK/RTS/02



GAMBLING COMMISSION — GAME TESTING SUMMARY REPORT

NG ENTERTAINMENT LTD

BISON GOLD, HTML5-DESKTOP, 1.0

CERTIFICATE NUMBER: E238539NTGGBRM

2. TEST RESULTS

Numerous tests were performed to ensure the game operates in compliance with the applicable requirements of RTS 7A, RTS 7B, RTS 7C, RTS 7E, RTS 9B.b and 9B.d (and the pre-release assessable elements of RTS 3A, RTS 3B, RTS 3C and RTS 5A) of the Gambling Commission's Remote Gambling and Software Technical Standards – February 2021, including an evaluation and verification of the software implementation of the game artwork, theoretical RTP and maths. Based on the testing conducted, the game is assessed as compliant with the applicable requirements of RTS 7A, RTS 7B, RTS 7C, RTS 7E, RTS 9B.b and RTS 9B.d (and pre-release assessable elements of RTS 3A, RTS 3B, RTS 3C and RTS 5A) of the Gambling Commission's Remote Gambling and Software Technical Standards – February 2021. In addition, we have verified that the game under certification does not contain the option to purchase direct access to any features.