

### RANDOMNESS EVALUATION REPORT

FOR

NG ENTERTAINMENT LTD MERMAID'S MEGA CHEST, HTML5-DESKTOP, 1.0

**CONFIDENTIAL** CERTIFICATE NUMBER: E237227NTGMLTM



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# SECTION 1. GENERAL INFORMATION

| License Holder:                 | NG Entertainment Ltd<br>30/1 Kenilworth Court<br>Sir Augustus Bartolo Street<br>TA' Xbiex<br>XBX 1093<br>Malta  |
|---------------------------------|---|
| Game Name:                      | Mermaid's Mega Chest  |
| Game Type:                      | Slot  |
| Platform Type:                  | HTML5-Desktop   |
| Game Version:                   | 1.0   |
| Applicable Technical Standards: | Licensing requirements of the Malta Gaming Authority ('MGA')<br>Subsidiary Legislation 438.04<br>Remote Gaming Regulations<br>Third Schedule, Regulation 25 |
| Testing Laboratory:             | eCOGRA Limited, trading as 'eCOGRA'<br>2/F Berkeley Square House<br>Berkeley Square<br>London W1J 6 BD<br>United Kingdom                                    |
| Test Engineers:                 | Humbulani Nedondwe; Ridhwaan Shariff  |
| Supervisor:                     | Kabelo Williams   |
| Request for Report:             | 02 June 2023  |
| Report Date:                    | 09 June 2023  |
| Certificate Number:             | e237227NTGMLTM  |



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 Mermaid's Mega Chest HTML5-Desktop 1.0 game produced statistically acceptable random numbers that were free of any significant statistical bias or predictability.

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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').

Mermaid's Mega Chest (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 02 June 2023 to 09 June 2023.

Please note that this is an initial certification conducted over Mermaid's Mega Chest, 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 Mermaid's Mega Chest 1.0 product was previously certified by (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 Mermaid's Mega Chest 1.0 game.

| Software Provider:         |   |
|----------------------------|---|
| Software Provider Address: |   |
| Product Name:              |   |
| Product Description:       |   |
| Jurisdiction:              | Defer to CUIDNC reports 412 10 001 UK DTC 02  |
| 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

Mermaid's Mega Chest (1.0)

### Game Description:

The game has 5 or more matching symbols connected either vertically or horizontally is a winning combination. Wins are multiplied by Coin Value and each game costs a minimum of 10 fixed coins.

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 |
|----------------------|-------------------|----------------------------|
| Mermaid's Mega Chest | 94.13%            | 94.04%                     |
|                      | Buy Bonus: 94.44% | Buy Bonus: 94.52%          |

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 | Version MD5 Hash Sum / SHA-1 Hash Sum |  |
|---------------------------|---------|---------------------------------------|--|
|                           | Date    | Number                                |  |
| line_wins_handler.inc.php | N/A     | N/A                                   | 4265BFE2ACF6549D2A8C2708DDCCC26E6657D396 |
| ConfigurationMM.txt       | N/A     | N/A                                   | 1371965F560207F0182FA90D4FDA854D6AC5A17F |



#### SECTION 8. REVIEW FINDINGS

| Rei | note Gaming Regulations   | Rating                   | Comments   |
|-----|---|--------------------------|--|
| Thi | rd Schedule - Regulation 25 - Technical requi   | ement for gaming syste   | em   |
| 1.  | The gaming system must:   |                          |  |
|     | a. faithfully follow the game ru published by the operator; and   | es Compliant             |  |
|     | <ul> <li>provide over time no more than t<br/>expected house advantage to t<br/>operator.</li> </ul>  |                          | Not applicable to this game type.  |
| 2.  | Both the gaming and financial transaction must be congruent and secure.   | ns Not applicable        | The certification testing included in this<br>report is limited to relevant game<br>requirements that can be assessed at<br>game supplier level. The certification<br>testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier. |
| 3.  | The gaming system must satisfy the following  | g criteria for randomnes |  |
|     | <ul> <li>a. the data must be randomly generate<br/>passing appropriate statistical tests<br/>randomness;</li> </ul>   | •                        | Refer to RNG certificate:<br>413-19-001-UK-RTS-02  |
|     | <ul> <li>b. the data must be unpredictable, i.e<br/>must be computationally infeasible<br/>predict what the next number will b<br/>given complete knowledge of t<br/>algorithm or hardware generating t<br/>sequence, and all previou<br/>generated numbers;</li> </ul> | to<br>be,<br>he<br>he    | Refer to RNG certificate:<br>413-19-001-UK-RTS-02  |
|     | c. the series cannot be relial<br>reproduced, i.e. if the sequen<br>generator is activated again with t<br>same input (as exactly as is reasonal<br>possible) it will produce to<br>completely unrelated rando<br>sequences.  | ce<br>he<br>bly<br>wo    | Refer to RNG certificate:<br>413-19-001-UK-RTS-02  |
| 4.  | The outcome of any game event, and the retu<br>to the player, must be independent of the CP<br>memory, disk or other components used in t<br>playing device used by the player.   | U,                       | Refer to RNG certificate:<br>413-19-001-UK-RTS-02  |
| 5.  | The game or any game event outcome must r<br>be affected by the effective bandwidth, li<br>utilisation, bit error rate or other characteris<br>of the communication channel between t   | nk<br>tic                |  |



| Ren | note Gaming Regulations   | Rating               | Comments  |  |  |
|-----|---|----------------------|---|--|--|
|     | rd Schedule - Regulation 25 - Technical requirem  | ent for gaming syste | m   |  |  |
|     | gaming system and the playing device used by  |                      |   |  |  |
|     | the player.   |                      |   |  |  |
| 6.  | 6. The gaming system must be able to display for each game the following information on the current page or o |                      |   |  |  |
|     | 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  |  |  |
| 8.  | The gaming system must  | Notapplicable        | the game supplier.  |  |  |
| 0.  | The gaming system must:<br>a. be capable of producing monthly   | Not applicable       | The certification testing included in this report is limited to relevant game |  |  |
|     | a. be capable of producing monthly auditable and aggregate financial  |                      | requirements that can be assessed at  |  |  |
|     | statements of gaming transactions,  |                      | game supplier level. The certification  |  |  |
|     | and   |                      | 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  |  |  |
| 0   |   |                      | the game supplier.  |  |  |
| 9.  | The gaming system must maintain information a   |                      |   |  |  |
|     | 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  |  |  |



| Remote Ga | ming Regulations  | Rating               | Comments   |
|-----------|---|----------------------|--|
|           | lule - Regulation 25 - Technical requirem                         | ent for gaming syste | m  |
|           |   |                      | testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier.   |
| b.        | the time the game began as recorded on the game's server;         | Compliant            |  |
| C.        | the balance on the player's account at the start of the game;     | Compliant            |  |
| d.        | the stakes placed in the game (time stamped by the games server); | Compliant            |  |
| e.        | the game status (in progress, complete, etc.);                    | Not applicable       | The certification testing included in this<br>report is limited to relevant game<br>requirements that can be assessed at<br>game supplier level. The certification<br>testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier. |
| f.        | the result of the game (time stamped by the games server);        | Compliant            |  |
| g.        | the time the game ended as recorded<br>by the games server;       | Not applicable       | The certification testing included in this<br>report is limited to relevant game<br>requirements that can be assessed at<br>game supplier level. The certification<br>testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier. |
| h.        | the amount won or lost by the player;<br>and                      | Compliant            |  |
| i.        | the balance on the player's account at<br>the end of the game.    | Not applicable       | The certification testing included in this<br>report is limited to relevant game<br>requirements that can be assessed at<br>game supplier level. The certification<br>testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier. |



| Remote Gaming Regulations   | Rating                | Comments   |  |  |
|---|-----------------------|--|--|--|
| Third Schedule - Regulation 25 - Technical requirement for gaming system  |                       |  |  |  |
| 10. The gaming system must maintain information a   | bout significant ever | nts as follows:  |  |  |
| a. large wins;  | Not applicable        | The certification testing included in this<br>report is limited to relevant game<br>requirements that can be assessed at<br>game supplier level. The certification<br>testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier. |  |  |
| <ul> <li>b. transfers of funds in excess of such<br/>amount as the Authority may from<br/>time to time direct by notice in writing<br/>to the operator;</li> </ul>              | Not applicable        | The certification testing included in this<br>report is limited to relevant game<br>requirements that can be assessed at<br>game supplier level. The certification<br>testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier. |  |  |
| c. changes made by the operator to game parameters.   | Not applicable        | The certification testing included in this<br>report is limited to relevant game<br>requirements that can be assessed at<br>game supplier level. The certification<br>testing excludes the assessment of<br>compliance against any requirements<br>where the game functionality or<br>information is not directly managed by<br>the game supplier. |  |  |
| <ol> <li>Any variations to any of the requirements<br/>specified in this Schedule shall be submitted to<br/>the Authority for its approval by notice in<br/>writing.</li> </ol> | Not applicable        | No variations identified for the product under certification.  |  |  |