

# **Smart Contract Security Audit**

## **Audit details:**

Audited project: BoomCoin

Deployer address: 0x6a6AD7876D99A995e7f74ec5D494E16aB86f3AF9

Client contacts: BoomCoin team

Blockchain: Binance Smart Chain

Project website: Not provided by the BoomCoin team

May, 2021 TechRate

## **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

## **Background**

TechRate was commissioned by BoomCoin to perform an audit of smart contracts:

• <a href="https://bscscan.com/address/0x761684e229f04ce8985b49e3beb1cd994c776">https://bscscan.com/address/0x761684e229f04ce8985b49e3beb1cd994c776</a>
a21#code

The purpose of the audit was to achieve the following:

- Ensure that the smart contract functions as intended.
- Identify potential security issues with the smart contract.

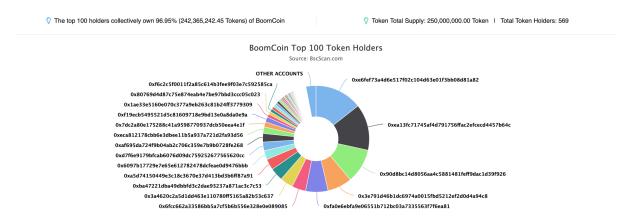
The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

# **Contracts details**

## Token contract details for 22.05.2021.

| Contract name:                    | FNX  |
|-----------------------------------|--|
| Contract address:                 | 0x761684e229f04ce8985b49e3BEB1CD994C776A21 |
| Total supply:                     | 250_000_000_000_000_000_000_000            |
| Token ticker:                     | BOOMC                                      |
| Decimals:                         | 18   |
| Token holders:                    | 569  |
| Transactions count:               | 2,419                                      |
| Top 100 holders dominance:        | 96.95%                                     |
| Contract deployer address:        | 0x6a6AD7876D99A995e7f74ec5D494E16aB86f3AF9 |
| Contract's current owner address: | 0xa5d74150449e3c18c3670e37d413bd3b6ff87a91 |

#### **BoomCoin token distribution**



(A total of 242,365,242.45 tokens held by the top 100 accounts from the total supply of 250,000,000.00 token)

### **BoomCoin contract interaction details**



| Rank | Address                                      | Quantity (Token)              | Percentage |
|------|--|-------------------------------|------------|
| 1    | 0xe6fef73a4d6e517f02c104d63e01f3bb08d81a82   | 36,007,997.389753371532261154 | 14.4032%   |
| 2    | 0xea13fc71745af4d791756ffac2efcecd4457b64c   | 35,117,024.189389986775455616 | 14.0468%   |
| 3    | 0x90d8bc14d8056aa4c5881481feff9dac1d39f926   | 26,105,628.674447405809144407 | 10.4423%   |
| 4    | 0x3e791d46b1dc6974a0015fbd5212ef2d0d4a94c8   | 18,659,822.632970459503631041 | 7.4639%    |
| 5    | 0xfa0e6ebfa9e06551b712bc03a7335563f7f6ea81   | 17,044,834.258901401637394885 | 6.8179%    |
| 6    | 0x6fcc662a33586bb5a7cf5b6b556e328e0e089085   | 10,506,255.585494912959382266 | 4.2025%    |
| 7    | 0x3a4620c2a5d1dd463e110780ff5165a82b53c637   | 9,938,633.300764847125412591  | 3.9755%    |
| 8    | 0xba47221dba49dbbfd3c2dae93237a871ac3c7c53   | 9,905,105.525763078999565797  | 3.9620%    |
| 9    | 0xa5d74150449e3c18c3670e37d413bd3b6ff87a91   | 8,351,565.66764818666659925   | 3.3406%    |
| 10   | ☐ 0x6097b17729e7e65e612782478dcfeae0d9476bbb | 6,936,204.53892750208609434   | 2.7745%    |

# **Contract functions details**

- + SafeMath
  - [Pub] safeAdd
  - [Pub] safeSub

- [Pub] safeMul
- [Pub] safeDiv
- + [Int] IERC20
  - [Ext] totalSupply
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #
- + ApproveAndCallFallBack
  - [Pub] receiveApproval #
- + Owned
  - [Pub] <Constructor> #
  - [Pub] transferOwnership #
    - modifiers: onlyOwner
  - [Pub] acceptOwnership #
- + BoomCoin (IERC20, Owned, SafeMath)
  - [Pub] <Constructor> #
  - [Pub] totalSupply
  - [Pub] balanceOf
  - [Pub] transfer #
  - [Pub] approve #
  - [Pub] transferFrom #
  - [Pub] allowance
  - [Pub] approveAndCall #
  - [Ext] <Fallback> (\$)
  - [Pub] transferAnyERC20Token #
    - modifiers: onlyOwner
- (\$) = payable function # = non-constant function

## **Issues Checking Status**

| Nº | Issue description. | Checking status                         |
|----|--------------------|---|
|    |                    | - · · · · · · · · · · · · · · · · · · · |

| 1  | Compiler errors.  | Passed |
|----|---|--------|
| 2  | Race conditions and Reentrancy. Cross-function race conditions. | Passed |
| 3  | Possible delays in data delivery.                               | Passed |
| 4  | Oracle calls.   | Passed |
| 5  | Front running.  | Passed |
| 6  | Timestamp dependence.   | Passed |
| 7  | Integer Overflow and Underflow.                                 | Passed |
| 8  | DoS with Revert.  | Passed |
| 9  | DoS with block gas limit.                                       | Passed |
| 10 | Methods execution permissions.                                  | Passed |
| 11 | Economy model of the contract.                                  | Passed |
| 12 | The impact of the exchange rate on the logic.                   | Passed |
| 13 | Private user data leaks.  | Passed |
| 14 | Malicious Event log.  | Passed |
| 15 | Scoping and Declarations.                                       | Passed |
| 16 | Uninitialized storage pointers.                                 | Passed |
| 17 | Arithmetic accuracy.  | Passed |
| 18 | Design Logic.   | Passed |
| 19 | Cross-function race conditions.                                 | Passed |
| 20 | Safe Open Zeppelin contracts implementation and usage.          | Passed |
| 21 | Fallback function security.                                     | Passed |

# **Security Issues**

# **High Severity Issues**

No high severity issues found.

## **Medium Severity Issues**

No medium severity issues found.

## Low Severity Issues

No low severity issues found.

# Owner privileges (In the period when the owner is not renounced)

Owner can transfer tokens from contract to any address

```
// ------
// Owner can transfer out any accidentally sent ERC20 tokens
// -------
function transferAnyERC20Token(address tokenAddress, uint tokens) public onlyOwner returns (bool success) {
    return IERC20(tokenAddress).transfer(owner, tokens);
}
```

#### Recommendation

☐ In transferFrom(address from,...) and transfer(address to,...) functions check that to address is not contract address

```
require(to != address(this));
```

## Conclusion

Smart contracts do not contain high severity issues.

#### Techrate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.