TechRate
January, 2025

SMART CONTRACTS SECURITY AUDIT REPORT

Audit Details

Audited project

BRICS Pay

Deployer address

0x5c85869378a9FF9F740938D57d4791c37c89b543

Client contacts:

BRICS Pay team

Blockchain

Binance Smart Chain

Project website:

Not provided

TECH RATE

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 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 BRICS Pay to perform an audit of smart contracts:
https://bscscan.com/address/0x5c85869378a9FF9F740938D57d4791c37c89b543#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.

Issues Checking Status

	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.

Notes:

- enableTrading() function doesn't set pairSet status.

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

- Owner can set pair.
- Owner can change fees.
- Owner can withdraw contract tokens and BNBs.
- Owner can exclude from the fees.
- Owner can change walletToWalletTransferFee.
- Owner can change marketingWallet.
- Owner can enable trading.
- Owner can change swapTokensAtAmount and enable swap.
- Owner can change wallet and transaction limit settings and exclusions.

Testnet deployment

Contracts Description Table

Contract	Type	Bases		
└	**Function Name**	**Visibility**	**Mutability**	**Modifiers**
ERC20	Implementation	Context, IERC20, IERC20Metadata		
└	transfer	Public ❗	🛑	NO❗
└	approve	Public ❗	🛑	NO❗
└	transferFrom	Public ❗	🛑	NO❗
└	increaseAllowance	Public ❗	🛑	NO❗
└	decreaseAllowance	Public ❗	🛑	NO❗
Citiquest	Implementation	ERC20, Ownable		
└	updateSellFees	External ❗	🛑	onlyOwner
└	claimStuckTokens	External ❗	🛑	onlyOwner
└	excludeFromFees	External ❗	🛑	onlyOwner
└	changeMarketingWallet	External ❗	🛑	onlyOwner
└	enableTrading	External ❗	🛑	onlyOwner

Legend

Symbol	Meaning
🛑	Function can modify state
💵	Function is payable

Contract: ONE

- ✓ should deploy the token with the correct name and symbol (1249ms)
- ✓ should assign the initial supply to the deployer (1703ms)
- ✓ should claim stuck tokens (16845ms)
- ✓ should set pair (12870ms)
- ✓ should set excluded from fee status (8008ms)
- ✓ should set buy taxes (6942ms)
- ✓ should set sell taxes (7155ms)
- ✓ should set walletToWalletTransferFee fee (6934ms)
- ✓ should set marketing wallet address (8068ms)
- ✓ should enable trading (7079ms)
- ✓ should set swap enabled (597ms)
- ✓ should set swap tokens at amount (6136ms)
- ✓ should enable max wallet limit (6027ms)
- ✓ should set max wallet limit (6966ms)
- ✓ should set excluded from max wallet limit (6011ms)
- ✓ should enable max transaction limit (7053ms)
- ✓ should set max transaction limit (7614ms)
- ✓ should set excluded from max transaction limit (7110ms)
- ✓ should transfer tokens between accounts (10757ms)
- ✓ should allow approvals and transfers from (27182ms)
- ✓ should increase and decrease allowances (16750ms)

21 passing (3m)

Conclusion

Smart contracts do not contain high severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details are NOT provided by the team.

Security score: 85.

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.