

# SMART CONTRACT CODE REVIEW AND SECURITY ANALYSIS REPORT



Customer: NoLimitCoin Date: March 26<sup>th</sup>, 2021



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### **Document**

Name	Smart Contract Code Review and Security Analysis Report for NLC - Second Review						
Approved by	Andrew Matiukhin   CTO Hacken OU						
Туре	Token						
Platform	Ethereum / Solidity						
Methods	Architecture Review, Functional Testing, Computer-Aided Verification, Manual Review						
Deployed contract	https://bscscan.com/address/0x6519cb1f694ccbcc72417570b364f2d051eefb9d #code						
Timeline	22 March 2021 – 23 March 2021						
Changelog	23 March 2021 - INITIAL AUDIT 26 March 2021 - SECOND REVIEW 02 APRIL 2021 - PRODUCTION CONTACT ADDED						

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#### Introduction

Hacken OÜ (Consultant) was contracted by NoLimitCoin (Customer) to conduct a Smart Contract Code Review and Security Analysis. This report presents the findings of the security assessment of Customer's smart contract and its code review conducted on March 18<sup>th</sup>, 2021.

Remediation check was done March 26, 2021.

## Scope

The scope of the project is smart contracts deployed in the Binance smart chain network:

https://bscscan.com/address/0x6519cb1f694ccbcc72417570b364f2d051eefb9d#code

We have scanned this smart contract for commonly known and more specific vulnerabilities. Here are some of the commonly known vulnerabilities that are considered:

Category	Check Item				
Code review	Reentrancy				
	<ul> <li>Ownership Takeover</li> </ul>				
	<ul> <li>Timestamp Dependence</li> </ul>				
	<ul> <li>Gas Limit and Loops</li> </ul>				
	<ul> <li>DoS with (Unexpected) Throw</li> </ul>				
	<ul> <li>DoS with Block Gas Limit</li> </ul>				
	Transaction-Ordering Dependence				
	<ul> <li>Style guide violation</li> </ul>				
	<pre>Costly Loop</pre>				
	<ul> <li>ERC20 API violation</li> </ul>				
	<ul> <li>Unchecked external call</li> </ul>				
	<ul> <li>Unchecked math</li> </ul>				
	<ul> <li>Unsafe type inference</li> </ul>				
	Implicit visibility level				
	<ul> <li>Deployment Consistency</li> </ul>				
	<ul> <li>Repository Consistency</li> </ul>				
	<ul> <li>Data Consistency</li> </ul>				
Functional review	<ul> <li>Business Logics Review</li> </ul>				
	<ul> <li>Functionality Checks</li> </ul>				
	<ul> <li>Access Control &amp; Authorization</li> </ul>				
	<ul> <li>Escrow manipulation</li> </ul>				
	<ul> <li>Token Supply manipulation</li> </ul>				
	Asset's integrity				
	<ul> <li>User Balances manipulation</li> </ul>				
	<ul> <li>Kill-Switch Mechanism</li> </ul>				
	<ul> <li>Operation Trails &amp; Event Generation</li> </ul>				

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## **Executive Summary**

According to the assessment, the Customer's smart contract is Well-secured.

Insecure		Poor secured		Secured	Well-secured		
				You are here	1		
Our team automated	performed an checks with	n analysis Mythril and	of code Slither	functionality All issues for	, manual ound durin	audit, ng autom	and ated

analysis were manually reviewed, and important vulnerabilities are presented in the Audit overview section. A general overview is presented in AS-IS section, and all found issues can be found in the Audit overview section.

Security engineers found 3 high and 4 informational issues during the first review.

Graph 1. The distribution of vulnerabilities after the first review.



Note: Security engineers found no issues during the second review.

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#### Conclusion

Smart contracts within the scope were manually reviewed and analyzed with static analysis tools. For the contract, high-level description of functionality was presented in As-Is overview section of the report.

Audit report contains all found security vulnerabilities and other issues in the reviewed code.

Security engineers found no issues during the audit.

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