

## **Security** Assessment: **Innovia Token Token**





April 23, 2024

- Audit Status: **Pass**
- Audit Edition: **Standard**
































# Risk Analysis

## Classifications of Manual Risk Results

Classification	Description
 Critical	Danger or Potential Problems.
 High	Be Careful or Fail test.
 Low	Pass, Not-Detected or Safe Item.
 Informational	Function Detected

## Manual Code Review Risk Results

Contract Privilege	Description
 Buy Tax	5%
 Sale Tax	5%
 Cannot Buy	Pass
 Cannot Sale	Pass
 Max Tax	10%
 Modify Tax	Yes
 Fee Check	Pass
 Is Honeypot?	Not Detected
 Trading Cooldown	Not Detected
 Can Pause Trade?	Pass
 Pause Transfer?	Not Detected
 Max Tx?	Pass
 Is Anti Whale?	Detected
 Is Anti Bot?	Not Detected

Contract Privilege	Description
 Is Blacklist?	Not Detected
 Blacklist Check	Pass
 is Whitelist?	Detected
 Can Mint?	Pass
 Is Proxy?	Not Detected
 Can Take Ownership?	Not Detected
 Hidden Owner?	Not Detected
 Owner	0x45b77DF62f0331bDb7c68B19ff9723b2290C8824
 Self Destruct?	Not Detected
 External Call?	Not Detected
 Other?	Not Detected
 Holders	0
 Auditor Confidence	Low Risk
 KYC Present	No
 KYC URL	I

The following quick summary it's added to the project overview; however, there are more details about the audit and its results. Please read every detail.

# Project Overview

## Token Summary

Parameter	Result
Address	0x1814b8A33446549Ed5766aB3250B670498699BD6
Name	Innovia Token
Token Tracker	Innovia Token (INVA)
Decimals	18
Supply	100,000,000
Platform	ETHEREUM
compiler	v0.8.24+commit.e11b9ed9
Contract Name	InnoviaToken
Optimization	Yes with 200 runs
LicenseType	MIT
Language	Solidity
Codebase	<a href="https://etherscan.io/token/0x1814b8a33446549ed5766ab3250b670498699bd6#code">https://etherscan.io/ token/0x1814b8a33446549ed5766ab3250b670498699bd6#code</a>
Payment Tx	Corporate

## Main Contract Assessed Contract Name

Name	Contract	Live
Innovia Token	0x1814b8A33446549Ed5766aB3250B670498699BD6	Yes

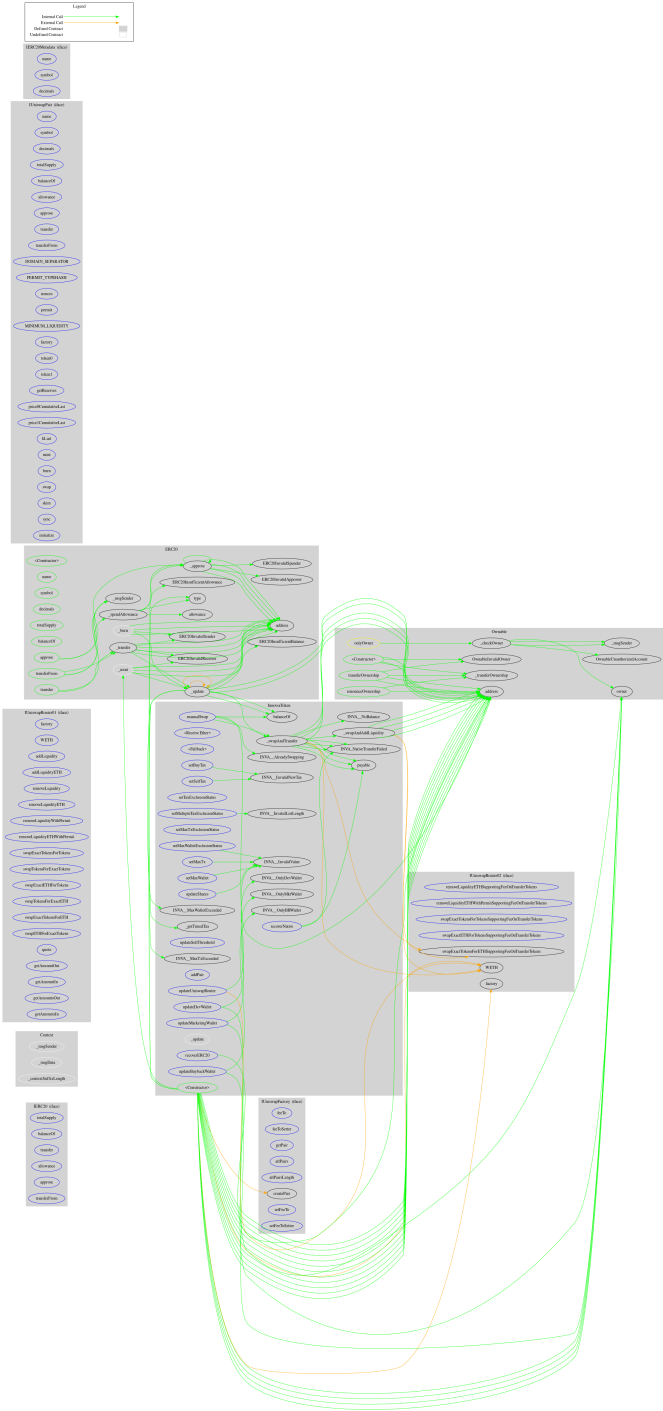
## TestNet Contract was Not Assessed

### Solidity Code Provided

SolidID	File Sha-1	FileName
INNOVIA	390b2d0c88c78b5e2a8ac6324782920a90afea65	InnoviaToken.sol
INNOVIA		
INNOVIA		
INNOVIA		
INNOVIA		
INNOVIA	undefined	

# Call Graph

The contract for Innovia Token has the following call graph structure.



# Smart Contract Vulnerability Checks

**The Smart Contract Weakness Classification Registry (SWC Registry) is an implementation of the weakness classification scheme proposed in EIP-1470. It is loosely aligned to the terminologies and structure used in the Common Weakness Enumeration (CWE) while overlaying a wide range of weakness variants that are specific to smart contracts.**

ID	Severity	Name	File	location
SWC-100	Pass	Function Default Visibility	InnoviaToken.sol	L: 0 C: 0
SWC-101	Pass	Integer Overflow and Underflow.	InnoviaToken.sol	L: 0 C: 0
SWC-102	Pass	Outdated Compiler Version file.	InnoviaToken.sol	L: 0 C: 0
SWC-103	Pass	A floating pragma is set.	InnoviaToken.sol	L: 0 C: 0
SWC-104	Pass	Unchecked Call Return Value.	InnoviaToken.sol	L: 0 C: 0
SWC-105	Pass	Unprotected Ether Withdrawal.	InnoviaToken.sol	L: 0 C: 0
SWC-106	Pass	Unprotected SELFDESTRUCT Instruction	InnoviaToken.sol	L: 0 C: 0
SWC-107	Pass	Read of persistent state following external call.	InnoviaToken.sol	L: 0 C: 0
SWC-108	Pass	State variable visibility is not set..	InnoviaToken.sol	L: 0 C: 0
SWC-109	Pass	Uninitialized Storage Pointer.	InnoviaToken.sol	L: 0 C: 0
SWC-110	Pass	Assert Violation.	InnoviaToken.sol	L: 0 C: 0
SWC-111	Pass	Use of Deprecated Solidity Functions.	InnoviaToken.sol	L: 0 C: 0
SWC-112	Pass	Delegate Call to Untrusted Callee.	InnoviaToken.sol	L: 0 C: 0
SWC-113	Pass	Multiple calls are executed in the same transaction.	InnoviaToken.sol	L: 0 C: 0
SWC-114	Pass	Transaction Order Dependence.	InnoviaToken.sol	L: 0 C: 0

ID	Severity	Name	File	location
SWC-115	Pass	Authorization through tx.origin.	InnoviaToken.sol	L: 0 C: 0
SWC-116	Pass	A control flow decision is made based on The block.timestamp environment variable.	InnoviaToken.sol	L: 0 C: 0
SWC-117	Pass	Signature Malleability.	InnoviaToken.sol	L: 0 C: 0
SWC-118	Pass	Incorrect Constructor Name.	InnoviaToken.sol	L: 0 C: 0
SWC-119	Pass	Shadowing State Variables.	InnoviaToken.sol	L: 0 C: 0
SWC-120	Pass	Potential use of block.number as source of randomness.	InnoviaToken.sol	L: 0 C: 0
SWC-121	Pass	Missing Protection against Signature Replay Attacks.	InnoviaToken.sol	L: 0 C: 0
SWC-122	Pass	Lack of Proper Signature Verification.	InnoviaToken.sol	L: 0 C: 0
SWC-123	Pass	Requirement Violation.	InnoviaToken.sol	L: 0 C: 0
SWC-124	Pass	Write to Arbitrary Storage Location.	InnoviaToken.sol	L: 0 C: 0
SWC-125	Pass	Incorrect Inheritance Order.	InnoviaToken.sol	L: 0 C: 0
SWC-126	Pass	Insufficient Gas Griefing.	InnoviaToken.sol	L: 0 C: 0
SWC-127	Pass	Arbitrary Jump with Function Type Variable.	InnoviaToken.sol	L: 0 C: 0
SWC-128	Pass	DoS With Block Gas Limit.	InnoviaToken.sol	L: 0 C: 0
SWC-129	Pass	Typographical Error.	InnoviaToken.sol	L: 0 C: 0
SWC-130	Pass	Right-To-Left-Override control character (U+202E).	InnoviaToken.sol	L: 0 C: 0
SWC-131	Pass	Presence of unused variables.	InnoviaToken.sol	L: 0 C: 0
SWC-132	Pass	Unexpected Ether balance.	InnoviaToken.sol	L: 0 C: 0



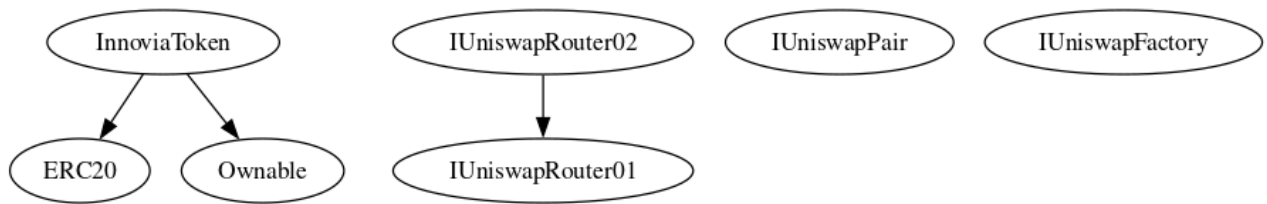
ID	Severity	Name	File	location
SWC-133	Pass	Hash Collisions with Multiple Variable Length Arguments.	InnoviaToken.sol	L: 0 C: 0
SWC-134	Pass	Message call with hardcoded gas amount.	InnoviaToken.sol	L: 0 C: 0
SWC-135	Pass	Code With No Effects (Irrelevant/Dead Code).	InnoviaToken.sol	L: 0 C: 0
SWC-136	Pass	Unencrypted Private Data On-Chain.	InnoviaToken.sol	L: 0 C: 0

We scan the contract for additional security issues using MYTHX and industry-standard security scanning tools.

# Inheritance

The contract for Innovia Token has the following inheritance structure.

The Project has a Total Supply of 100,000,000



## Privileged Functions (onlyOwner)






Please Note if the contract is Renounced none of this functions can be executed.

Function Name	Parameters	Visibility
transferOwnership	address newOwner	Public
renounceOwnership		Public
setMaxWallet	uint256 _maxWallet	External
setMaxTx	uint256 _maxTx	External
updateDevWallet	address _devWallet	External
updateMarketingWallet	address _marketingwallet	External
updateBuybackWallet	address _buybackWallet	External
updateSellThreshold	uint _sellThreshold	External
manualSwap		External
addPair	address _pair	External
updateShares	uint8 _mktShare, uint8 _devShare, uint8 _bbShare, uint8 _liqShare	External
updateUniswapRouter	address _router	External
recoverNative	address _to, uint _amount	External






Function Name	Parameters	Visibility
recoverERC20	address _token, address _to	External
setBuyTax	uint8 _buyTax	External
setSellTax	uint8 _sellTax	External
setTaxExclusionStatus	address _address, bool _status	External
setMultipleTaxExclusionStatus	address[] addresses, bool _status	External
setMaxTxExclusionStatus	address _address, bool _status	External
setMaxWalletExclusionStatus	address _address, bool _status	External

# Technical Findings Summary

## Classification of Risk

Severity	Description
 Critical	Risks are those that impact the safe functioning of a platform and must be addressed before launch. Users should not invest in any project with outstanding critical risks.
 High	Risks can include centralization issues and logical errors. Under specific circumstances, these major risks can lead to loss of funds and/or control of the project.
 Medium	Risks may not pose a direct risk to users' funds, but they can affect the overall functioning of a platform
 Low	Risks can be any of the above but on a smaller scale. They generally do not compromise the overall integrity of the Project, but they may be less efficient than other solutions.
 Informational	Errors are often recommended to improve the code's style or certain operations to fall within industry best practices. They usually do not affect the overall functioning of the code.

## Findings

Severity	Found	Pending	Resolved
 Critical	0	0	0
 High	0	0	0
 Medium	0	0	0
 Low	0	0	0
 Informational	0	0	0
Total	0	0	0

# Social Media Checks

Social Media	URL	Result
Twitter		Pass
Other	no	N/A
Website		Pass
Telegram		Pass

We recommend to have 3 or more social media sources including a completed working websites.

**Social Media Information Notes:**

**Auditor Notes:** undefined

**Project Owner Notes:**



# Assessment Results

## Score Results

Review	Score
Overall Score	85/100
Auditor Score	90/100
Review by Section	Score
Manual Scan Score	10
SWC Scan Score	37
Advance Check Score	38

The Following Score System Has been Added to this page to help understand the value of the audit, the maximum score is 100, however to attain that value the project must pass and provide all the data needed for the assessment. Our Passing Score has been changed to 84 Points for a higher standard, if a project does not attain 85% is an automatic failure. Read our notes and final assessment below.

## Audit Passed



## Assessment Results

### Important Notes:

- Conclusion: With the updates and justifications provided, the Innovia Token contract has made significant progress in addressing the initial audit concerns. The client has made informed decisions regarding certain design elements, such as the high initial tax rate and the absence of a circuit breaker, which are intentional and align with their requirements. The implementation of a custom reentrancy guard and the inclusion of token recovery functionality enhance the contract's security and user protection. The ability to update the Uniswap router address adds flexibility for future changes. The score reflects the contract's improved state, considering the client's preferences and the revisions made. It is still advisable to perform comprehensive testing and potentially engage a third-party audit to ensure the highest level of security and reliability upon deployment.

**Auditor Score =90**  
**Audit Passed**





# Appendix

## Finding Categories

### Centralization / Privilege

Centralization / Privilege findings refer to either feature logic or implementation of components that act against the nature of decentralization, such as explicit ownership or specialized access roles in combination with a mechanism to relocate funds.

### Gas Optimization

Gas Optimization findings do not affect the functionality of the code but generate different, more optimal EVM opcodes resulting in a reduction on the total gas cost of a transaction.

### Logical Issue

Logical Issue findings detail a fault in the logic of the linked code, such as an incorrect notion on how `block.timestamp` works.

### Control Flow

Control Flow findings concern the access control imposed on functions, such as owner-only functions being invoke-able by anyone under certain circumstances.

### Volatile Code

Volatile Code findings refer to segments of code that behave unexpectedly on certain edge cases that may result in a vulnerability.

### Coding Style

Coding Style findings usually do not affect the generated byte-code but rather comment on how to make the codebase more legible and, as a result, easily maintainable.

### Inconsistency

Inconsistency findings refer to functions that should seemingly behave similarly yet contain different code, such as a constructor assignment imposing different requirements on the input variables than a setter function.

### Coding Best Practices

ERC 20 Coding Standards are a set of rules that each developer should follow to ensure the code meets a set of criteria and is readable by all the developers.

# Disclaimer

Assure Defi has conducted an independent security assessment to verify the integrity of and highlight any vulnerabilities or errors, intentional or unintentional, that may be present in the reviewed code for the scope of this assessment. This report does not constitute agreement, acceptance, or advocacy for the Project, and users relying on this report should not consider this as having any merit for financial advice in any shape, form, or nature. The contracts audited do not account for any economic developments that the Project in question may pursue, and the veracity of the findings thus presented in this report relate solely to the proficiency, competence, aptitude, and discretion of our independent auditors, who make no guarantees nor assurance that the contracts are entirely free of exploits, bugs, vulnerabilities or deprecation of technologies.

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