



Cyberscope

# Audit Report

## **BIM**

October 2023

Network MATIC

Address 0xe78649874bcDB7a9D1666E665F340723a0187482

Audited by © cyberscope

# Analysis

● Critical ● Medium ● Minor / Informative ● Pass

Severity	Code	Description	Status
●	ST	Stops Transactions	Passed
●	OTUT	Transfers User's Tokens	Passed
●	ELFM	Exceeds Fees Limit	Passed
●	MT	Mints Tokens	Passed
●	BT	Burns Tokens	Passed
●	BC	Blacklists Addresses	Passed

# Diagnostics

● Critical ● Medium ● Minor / Informative

Severity	Code	Description	Status
●	L19	Stable Compiler Version	Unresolved

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## Review

<b>Contract Name</b>	BIM
<b>Compiler Version</b>	v0.8.9+commit.e5eed63a
<b>Optimization</b>	200 runs
<b>Explorer</b>	<a href="https://polygonscan.com/address/0xe78649874bcdb7a9d1666e665f340723a0187482">https://polygonscan.com/address/0xe78649874bcdb7a9d1666e665f340723a0187482</a>
<b>Address</b>	0xe78649874bcdb7a9d1666e665f340723a0187482
<b>Network</b>	MATIC
<b>Symbol</b>	BIM
<b>Decimals</b>	18
<b>Total Supply</b>	313,997,868

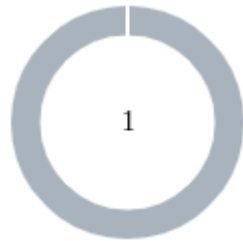
## Audit Updates

<b>Initial Audit</b>	18 Oct 2023
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## Source Files

Filename	SHA256
<b>contracts/BIM.sol</b>	625868ac1657391b54ee1892b1e1574d2e14a0700086a57a714d1847701e635d
<b>@openzeppelin/contracts/utils/Context.sol</b>	1458c260d010a08e4c20a4a517882259a23a4baa0b5bd9add9fb6d6a1549814a
<b>@openzeppelin/contracts/token/ERC20/IERC20.sol</b>	94f23e4af51a18c2269b355b8c7cf4db8003d075c9c541019eb8dcf4122864d5
<b>@openzeppelin/contracts/token/ERC20/ERC20.sol</b>	5031430cc2613c32736d598037d3075985a2a09e61592a013dbd09a5bc2041b8
<b>@openzeppelin/contracts/token/ERC20/extensions/IERC20Metadata.sol</b>	af5c8a77965cc82c33b7ff844deb9826166689e55dc037a7f2f790d057811990
<b>@openzeppelin/contracts/token/ERC20/extensions/ERC20Burnable.sol</b>	0344809a1044e11ece2401b4f7288f414ea41fa9d1dad24143c84b737c9fc02e

# Findings Breakdown



- Critical 0
- Medium 0
- Minor / Informative 1

Severity	Unresolved	Acknowledged	Resolved	Other
<span style="color: red;">●</span> Critical	0	0	0	0
<span style="color: gold;">●</span> Medium	0	0	0	0
<span style="color: grey;">●</span> Minor / Informative	1	0	0	0

## L19 - Stable Compiler Version

<b>Criticality</b>	Minor / Informative
<b>Location</b>	contracts/BIM.sol#L2
<b>Status</b>	Unresolved

### Description

The `^` symbol indicates that any version of Solidity that is compatible with the specified version (i.e., any version that is a higher minor or patch version) can be used to compile the contract. The version lock is a mechanism that allows the author to specify a minimum version of the Solidity compiler that must be used to compile the contract code. This is useful because it ensures that the contract will be compiled using a version of the compiler that is known to be compatible with the code.

```
pragma solidity ^0.8.4;
```

### Recommendation

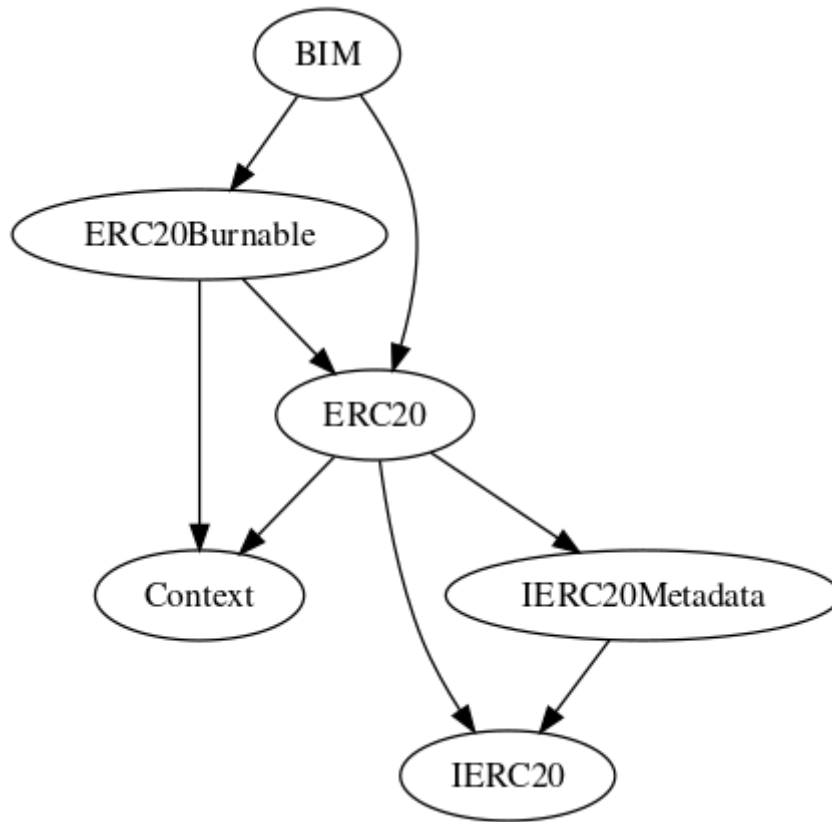
The team is advised to lock the pragma to ensure the stability of the codebase. The locked pragma version ensures that the contract will not be deployed with an unexpected version. An unexpected version may produce vulnerabilities and undiscovered bugs. The compiler should be configured to the lowest version that provides all the required functionality for the codebase. As a result, the project will be compiled in a well-tested LTS (Long Term Support) environment.



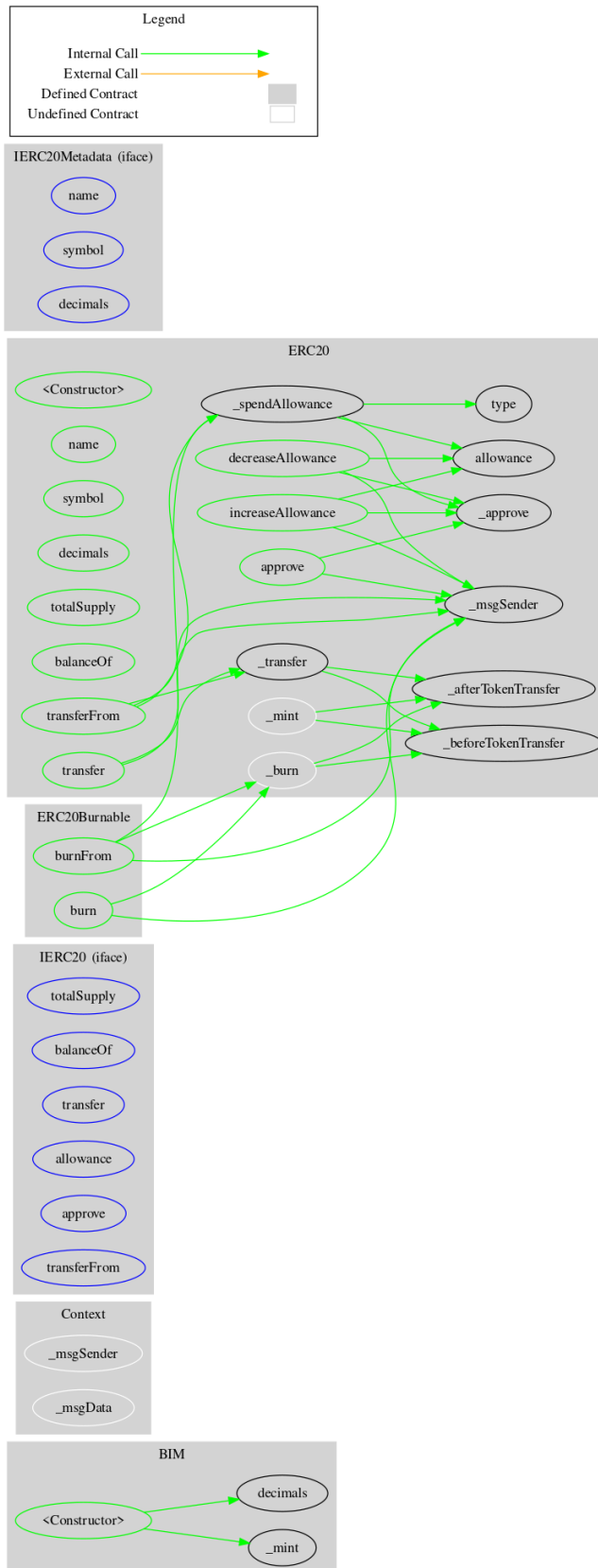
## Functions Analysis

Contract	Type	Bases		
	Function Name	Visibility	Mutability	Modifiers
<b>BIM</b>	Implementation	ERC20, ERC20Burnable		
		Public	✓	ERC20

# Inheritance Graph



# Flow Graph



## Summary

BIM contract implements a token mechanism. This audit investigates security issues, business logic concerns and potential improvements. BIM is an interesting project that has a friendly and growing community. The Smart Contract analysis reported no compiler error or critical issues. The contract Owner can access some admin functions that can not be used in a malicious way to disturb the users' transactions.

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# About Cyberscope

Cyberscope is a blockchain cybersecurity company that was founded with the vision to make web3.0 a safer place for investors and developers. Since its launch, it has worked with thousands of projects and is estimated to have secured tens of millions of investors' funds.

Cyberscope is one of the leading smart contract audit firms in the crypto space and has built a high-profile network of clients and partners.



**The Cyberscope team**

<https://www.cyberscope.io>