Agro Global TokenV2
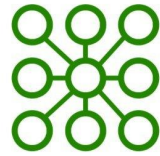

BSC Contracts
Audit Report

ZC Guard Audit NO: 191420623/A

AgroGlobal Token Contracts Audit Report

1 Executive Summary

1.1 Project Information

Type	RealFi , ReFi , Dex
Auditors	ZC Guard
Timeline	2023-6-19 to 2023-6-20
Languages	Solidity
Methods	Architecture Review, Unit Testing, Formal Verification, Manual Review
Source Code	Max circ: 95.000.000.000 AGRO (not-mint)
	Decimal : 18
	0x404f83279c36e3E0e2771B7ae9f9B0B2B50EE27C
	BSCScan :
	https://bscscan.com/token/0x404f83279c36e3E0e2771B7ae9f9B0B2B50EE27C
Updates	NIL

1.2 Issue Statistic

Item	Count	Fixed	Pending	Confirmed
Total	1	1		1
Minor	1	1		1
Medium	NIL			
Major	NIL			
Critical	NIL			

1.3 Issue Level

Minor issues are general suggestions relevant to best practices and readability. They don't •
post any direct risk. Developers are encouraged to fix them.

Medium issues are non-exploitable problems and not security vulnerabilities. They should be •
fixed unless there is a specific reason not to.

Major issues are security vulnerabilities. They put a portion of users' sensitive information at •
risk, and often are not directly exploitable. All major issues should be fixed. Critical issues
are directly exploitable security vulnerabilities. They put users' sensitive •
information at risk. All critical issues should be fixed.

1.4 Issue Status

- Fixed: The issue has been resolved.

- Pending: The issue has been acknowledged by the code owner, but has not yet been resolved. The code owner may take action to fix it in the future.

- Confirmed: The issue has been acknowledged by the code owner, and the code owner confirms it's as designed, and decides to keep it.

2 Summary of Findings

Why Agro Global Token ? Agriculture is an indispensable sector in the world economy due to reasons such as providing the food need of the world population, contributing to income and employment, meeting the raw material needs of the industrial sector, transferring capital to the industry, contributing directly and indirectly to the country's exports. The world's growing need for agriculture and agricultural products rapidly increases the economic power of the industry. Fear of hunger and famine is the cause of wars. In countries where agriculture is strong, economic development is at the highest level.

Agro Global Token is the digital currency of Agro Global Group which operates in the indispensable agriculture sector. Agro Global Token token is based on a real economic asset that has a known or easily ascertainable market price. Planning to increase production capacity and efficiency by expanding agricultural areas with token revenues will make it even stronger in the future. With its strong company structure, the projects it has developed, its investments in modern agriculture, the use of high technology, and the combination of agriculture and technology in the fields and in the blockchain network, AGRO Global Group continues to gain strength and value. Develops projects in the metaverse and breaks new ground with the E-META trading system. The company works for the use of Agro Global Token in international agricultural trade, AS PER https://agroglobal.network/images/agro.pdf , and reviewed the code of the AptoPad project. The audit team mainly focused on reviewing the code security and normative. Our team has been in close contact with the developing team for the past few days. As a result, our team found a total of 2 issues. The teams have discussed these issues together, and the development team has addressed these issues.

The following are the main roles in the smart contract with their respective capabilities: (1)

(1) Admin

- Admin can initialize the AgroGlobal Token module.

- Admin can freeze users.

- Admin can unfreeze users.

- Admin is not able to mint new tokens.

^b
(2) User

- User can register AGRO Tokens.

- User can burn coins from self.

3 ZenithCore Guard Audit BreakDown

ZC Guard aims to assess repositories for security-related issues, code quality, and compliance with specifications and best practices. Possible issues we looked for included (but are not limited to):

- Transaction-ordering dependence

- Timestamp dependence

- Integer overflow/underflow by bit operations

- Number of rounding errors

- Denial of service / logical oversights

- Access control

- Centralization of power

- Business logic contradicting the specification

- Code clones, functionality duplication

- Gas usage

- Arbitrary token minting

- Unchecked CALL Return Values

- The flow of capability

- Type Witness

4 Methodology

The security team adopted the "Testing and Automated Analysis", "Code Review" and "Formal Verification" strategy to perform a complete security test on the code in a way that is closest to the real attack. The main entrance and scope of security testing are in the conventions in the "Audit Objective", and that can expand to the context beyond the scope according to the actual testing needs. The main types of this security audit include:

(1) Testing and Automated Analysis

Items to check: state consistency / failure rollback / unit testing / value overflows / parameter verification / unhandled errors / boundary checking / coding specifications.

(2) Code Review

Code scope sees Appendix 1.

(3) Formal Verification

Perform formal verification for key functions with the Solidity Prover.

(4) Audit Process

- Carry out relevant security tests on the testnet or the mainnet;

- If there are any questions during the audit process, communicate with the code owner in time, and they should actively cooperate (which may include the latest stable source code, relevant deployment scripts or methods, transaction signature scripts, exchange docking schemes, etc.);

- The necessary information during the audit process will be well documented for both the audit team and the code owner in time.

5 Findings

5.1 The admin account can freeze any user's account

Severity: Minor

Status: Confirmed

Descriptions: The admin account can freeze any user's account. This means that the user can't withdraw or transfer their AGRO tokens. And the admin account has large power. If its private key is lost, it can cause great damage or great advantage for investors.

Code Location: Agro Global Token, line 71, 81.

```
function blacklist_address(address account) public onlyOwner {
    blacklist[account] = true;
}

function unblacklist_address(address account) public onlyOwner {
    blacklist[account] = false;
}

function setPairAddress(address pairAddress) public onlyOwner {
    _pairAddress = pairAddress;
```

Suggestion: Use a multi-signature account or set up a governance committee to manage the relevant accounts.

Confirmed: Communicated with the developer team, and they designed it in this way, and they already deployed the contract on BSC mainnet, so they decided to keep this behavior to manage potential malicious users and avoid losses.

Appendix 1 - Files in Scope

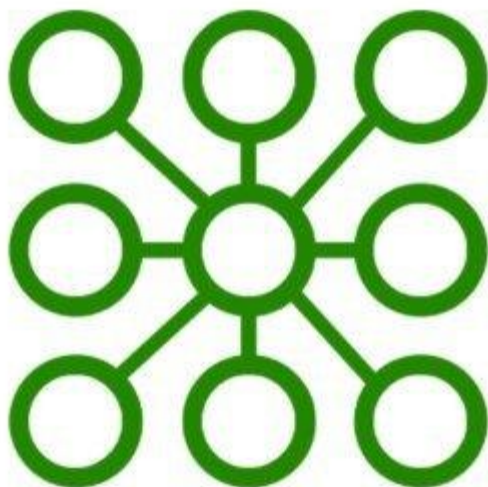The following are the SHA1 hashes of the last reviewed files.

Files	SHA-1 Hash
https://bscscan.com/token/0x404f83279c36e3E0e2771B7ae9f9B0B2B50EE27C#code	0x404f83279c36e3E0e2771B7ae9f9B0B2B50EE27C
AgroGlobal Token **AGROGLOBALTOKENV2**	

Appendix 2 - Disclaimer

This report is based on the scope of materials and documents provided, with a limited review at the time provided. Results may not be complete and do not include all vulnerabilities. The review and this report are provided on an as-is, where-is, and as-available basis. You agree that your access and/or use, including but not limited to any associated services, products, protocols, platforms, content, and materials, will be at your own risk. A report does not imply an endorsement of any particular project or team, nor does it guarantee its security. These reports should not be relied upon in any way by any third party, including for the purpose of making any decision to buy or sell products, services, or any other assets. TO THE FULLEST EXTENT PERMITTED BY LAW, WE DISCLAIM ALL WARRANTIES, EXPRESS OR IMPLIED, IN CONNECTION WITH THIS REPORT, ITS CONTENT, RELATED SERVICES AND PRODUCTS, AND YOUR USE, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NOT INFRINGEMENT.

Agro Global Token Details :

- Website : https://agroglobal.network/
- Telegram Channel : https://t.me/agroglobalgrouptoken
- Telegram Global Group : https://t.me/agroglobalofficial
- Telegram Turkey Group : https://t.me/agroglobaltr
- Telegram Indaonesia Group : https://t.me/AgroGlobalTokenIndonesia
- Telegram Bangladesh Group : https://t.me/Agroglobaltokenbengladesh
- Coinmarketcap Link: https://coinmarketcap.com/currencies/agro-global/
- Twitter Account : https://twitter.com/AgroGlobaltoken
- Instagram Account : https://www.instagram.com/agroglobaltoken/
- Youtube Account : https://www.youtube.com/channel/UCeIBuNeTszPAkqXDwUmMaDw
- Medium Account : https://agroglobalgroup.medium.com/
- Github Account : https://github.com/AgroGlobalToken

https://twitter.com/ZCSafe_

https://linktr.ee/zenithcorelabs