# TECH • RATE

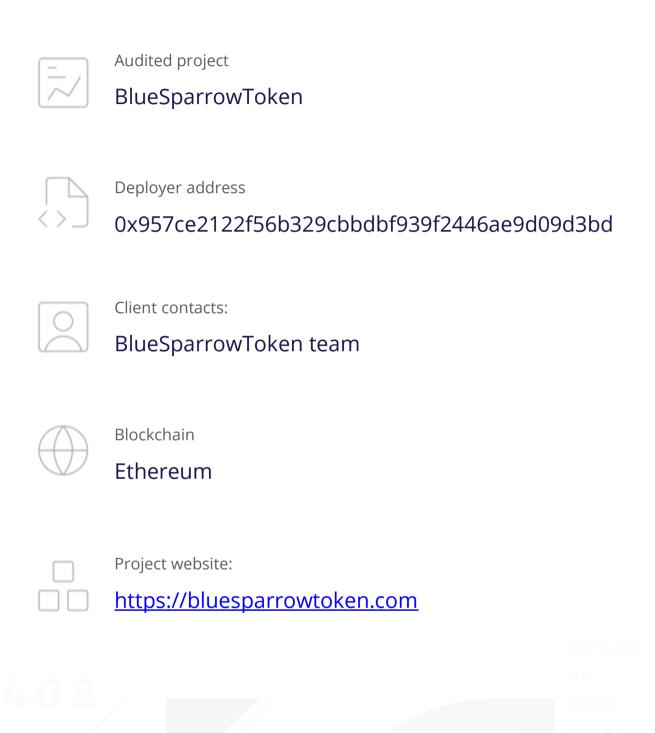
### SMART CONTRACTS SECURITY **AUDIT REPORT**







#### **Audit Details**





#### 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 BlueSparrowToken to perform an audit of smart contracts:

https://etherscan.io/address/0x24ccedebf841544c9e6a62af4e8c2fa6e5a46fde#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.



#### **C**ontracts Details

#### **Token contract details for 22.06.2022**

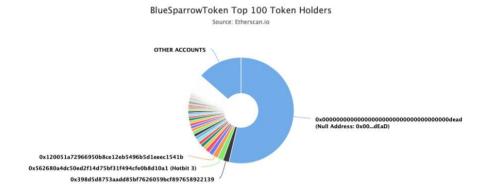
Contract name	BlueSparrowToken
Contract address	0x24cCeDEBF841544C9e6a62Af4E8c2fA6e5a46FdE
Total supply	100,000,000
Token ticker	BlueSparrow
Decimals	9
Token holders	5,941
Transactions count	6,850
Top 100 holders dominance	86.37%
Total fees	50000000500000
MaChWallet	0xa6f368fc6f4f3f7bbe224b392c50abc1d585f083
Draw wallet	0x1f054a5e9ac34abd49a3c02078dff1eb9ccb83cf
Contract deployer address	0x957ce2122f56b329cbbdbf939f2446ae9d09d3bd
Owner address	0x957ce2122f56b329cbbdbf939f2446ae9d09d3bd



## BlueSparrowToken Token Distribution

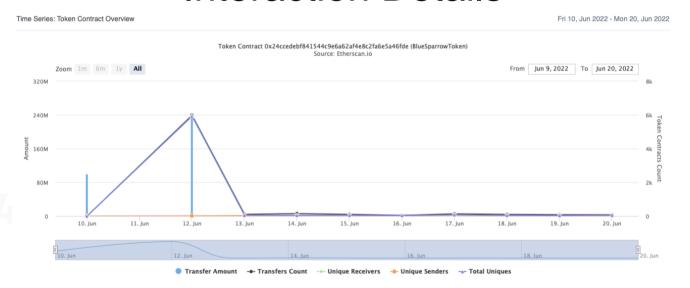


▼ Token Total Supply: 100,000,000.00 Token | Total Token Holders: 5,941



(A total of 86,370,546.98 tokens held by the top 100 accounts from the total supply of 100,000,000.00 token)

### BlueSparrowToken Contract Interaction Details





# BlueSparrowToken Top 10 Token Holders

Rank	Address	Quantity (Token)	Percentage
1	Null Address: 0x00dEaD	53,678,998.164582466	53.6790%
2	0x398d5d8753aadd85bf7626059bcf897658922139	1,881,253.006523996	1.8813%
3	Hotbit 3	1,801,926.55340613	1.8019%
4	0x120051a72966950b8ce12eb5496b5d1eeec1541b	1,616,818.525785411	1.6168%
5	☐ Uniswap V2: BlueSparrow 2	1,428,017.198938355	1.4280%
6	0xf14b674507390bef4435386a8177bc4d55386f21	1,318,932.636040472	1.3189%
7	0x4b41907815334bce841b75f32840e86e149db52f	1,044,125.978057615	1.0441%
8	0x858c37l3711daba83l2376c156074d8577al375c	1,038,718.811003014	1.0387%
9	0x729492283a428b43621b93e46ee15dd77052792c	994,510.121812509	0.9945%
10	0x32b9c16065373cb9a62f7bce002cc3f047ac47ac	946,522.226440847	0.9465%

65 76C6 5C780 29C4CAD8 C4 87C9C





#### **Contract functions details**

- + Context
  - [Int] \_msgSender
  - [Int] \_msgData
- + [Int] IERC20
  - [Ext] totalSupply
  - [Ext] balanceOf
  - [Ext] transfer #
  - [Ext] allowance
  - [Ext] approve #
  - [Ext] transferFrom #
- + [Lib] SafeMath
  - [Int] add
  - [Int] sub
  - [Int] sub
  - [Int] mul
  - [Int] div
  - [Int] div
  - [Int] mod
  - [Int] mod
- + [Lib] Address
  - [Int] isContract
  - [Int] sendValue #
  - [Int] functionCall #
  - [Int] functionCall #
  - [Int] functionCallWithValue #
  - [Int] functionCallWithValue #
  - [Prv] \_functionCallWithValue #
- + Ownable (Context)
  - [Int] <Constructor> #
  - [Pub] owner
  - [Pub] renounceOwnership #
    - modifiers: onlyOwner
  - [Pub] transferOwnership #
    - modifiers: onlyOwner
- + BlueSparrow (Context, IERC20, Ownable)
  - [Pub] <Constructor> #

- [Pub] addTaxFree #
  - modifiers: onlyOwner
- [Pub] reTaxFree #
  - modifiers: onlyOwner
- [Pub] addWWL #
  - modifiers: onlyOwner
- [Pub] reWWL #
  - modifiers: onlyOwner
- [Pub] addDWL #
  - modifiers: onlyOwner
- [Pub] reDWL #
  - modifiers: onlyOwner
- [Pub] changeDrawWallet #
  - modifiers: onlyOwner
- [Pub] changeMaChAdd #
  - modifiers: onlyOwner
- [Pub] name
- [Pub] symbol
- [Pub] decimals
- [Pub] totalSupply
- [Pub] balanceOf
- [Pub] transfer #
- [Pub] allowance
- [Pub] approve #
- [Pub] transferFrom #
- [Pub] increaseAllowance #
- [Pub] decreaseAllowance #
- [Pub] totalFees
- [Pub] reflect #
- [Pub] tokenFromReflection
- [Prv] \_approve #
- [Prv] transfer #
- [Prv] \_transferStandard #
- [Prv] \_transferWhiteList #
- [Prv] \_getValues
- [Prv] \_getRate
- (\$) = payable function
- # = non-constant function

### **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 1780
20.	Safe Open Zeppelin contracts implementation and usage.	Passed
21.	Fallback function security.	Passed

#### **Security Issues**

No high severity issues found.

No medium severity issues found.

No low severity issues found.

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

- Owner can enable/disable fees.
- Owner can add/remove withdraw whiteList addresses.
- Owner can add/remove deposit whiteList addresses.
- Owner can change DrawWallet and MaChWallet.

#### Conclusion

Smart contracts do not contain high severity issues. The further transfers and operations with the funds raise are not related to this particular contract.

#### 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.