COINGT ERC20 Token Contract

Overview

The COINGT token is an ERC20-compliant smart contract deployed on the Ethereum blockchain. It is designed to serve as a secure, transparent, and efficient digital asset. The contract adheres to industry standards and has been well-documented to meet regulatory and operational requirements.

This document outlines the contract's features, functionalities, and transaction history, providing clarity for regulators and stakeholders.

Key Features

- **ERC20 Standard Compliance**: Implements all mandatory functions (transfer, approve, transferFrom, balanceOf, etc.) and events (Transfer, Approval), ensuring compatibility with Ethereum wallets and applications.
- **Transparent Documentation**: The contract is fully commented, explaining the functionality and purpose of each component for easy auditing and regulatory review.
- **Minting and Burning**: Includes owner-controlled minting and burning mechanisms to manage the token supply effectively.
- **Secure Access Control**: Utilizes the Ownable module to restrict sensitive operations like minting and burning to the contract owner.
- **Event Logging**: Emits ERC20 standard events (**Transfer**, **Approval**) for transparency and traceability on the blockchain.

Technical Details

Token Metadata

Token Name: COINGTToken Symbol: COINGT

• **Decimals**: 0 (integer-based token for simplicity)

Initial Supply: 195,770 tokens minted to the deployer upon deployment
Contract Address: 0x7a1Eb5e5F2e1587D2DC3350Ac51E57f46dc28C32

Functionalities

1. Basic ERC20 Functions:

- transfer(address recipient, uint256 amount): Transfers tokens to a recipient.
- o approve(address spender, uint256 amount): Approves a spender to use a specific amount of tokens.
- transferFrom(address sender, address recipient, uint256 amount): Transfers tokens using an allowance mechanism.
- balanceOf(address account): Returns the token balance of a specific account.
- totalSupply(): Returns the total supply of tokens.

2. Owner-Only Functions:

- mint(address account, uint256 amount): Mints new tokens and assigns them to a specific account.
- burn(address account, uint256 amount): Burns tokens, reducing the total supply.
- transferOwnership(address newOwner): Transfers contract ownership to a new address.
- renounceOwnership(): Renounces ownership, leaving the contract without an owner.

3. Allowance Management:

- increaseAllowance(address spender, uint256 addedValue): Increases a spender's allowance.
- decreaseAllowance(address spender, uint256 subtractedValue): Decreases a spender's allowance.

Transaction History

Burning Event

As part of the token's lifecycle management, a **burning event** was conducted to reduce the token supply. This demonstrates responsible supply control and a commitment to maintaining value.

• Transaction Hash:

0x57d1577ddda25acbe9d6ef525bf106b7b7fc79093160f77b220380c129c98c75

• Tokens Burned: 42,546

• **Date**: November 22/2024.

Security Features

- **No Overflow/Underflow Risks**: Built-in Solidity 0.8.x protections eliminate the need for external libraries like SafeMath.
- **Zero Address Checks**: Ensures no tokens are transferred, minted, or burned to/from the zero address.
- Event Logging: Tracks all token transfers and approvals for transparency.
- **Well-Documented Code**: Inline comments improve clarity and provide a detailed understanding of the contract's purpose and functionality.

Deployment and Verification

- **Blockchain**: Ethereum Mainnet
- Contract Address: 0x7a1Eb5e5F2e1587D2DC3350Ac51E57f46dc28C32
- **Source Code**: Verified and available on Etherscan.

For any questions or further clarifications, please contact the team here: <u>info@coingt.com</u>