

# ORC-55 Technical Brief

**Issued by:** Bazaars Development Team

**First Implementation:** BZR (Bazaars Token)

**Compatibility:** Fully ERC-20 Compatible

## 1. Executive Summary

Bazaars has developed and launched **ORC-55**, a next-generation fungible token standard that addresses key operational, security, and survivability limitations of ERC-20 while maintaining complete backward compatibility with existing blockchain infrastructure.

BZR, the first ORC-55 token, is already live and trading — **deployed simultaneously on 10 major blockchains:**

Ethereum, BNB Chain, Base, Polygon, Arbitrum, Avalanche, zkSync Era, Cronos, Mantle, and Optimism.

This launch demonstrates ORC-55's scalability, survivability, and interoperability at a level unmatched by any previous token standard.

## 2. Market Evolution: From Chain-Centric to Asset-Centric

### Legacy Model (ERC-20 and similar)

- Tokens were tied to a single blockchain, inheriting its strengths and weaknesses.
- If a chain suffered high fees, slow speeds, governance failures, or security compromise, the token's market performance was directly impacted.
- Migrating to a new chain required swaps, new contract addresses, and often split liquidity — confusing users and breaking integrations.

### ORC-55 Model

- The **asset itself** becomes the brand and trust anchor, independent of any single blockchain.
- The same token contract, at the same address, is deployed across multiple chains from inception.
- Chain performance becomes a service to the asset — liquidity naturally flows to the most performant networks without the asset losing identity or authenticity.
- In BZR's case, this means **day-one presence across 10 chains**, ensuring resilience and broad accessibility.

### Strategic Implications

- Liquidity follows the asset, not the chain.

- Exchanges can list the canonical ORC-55 asset once while supporting deposits/withdrawals across all supported chains.
- Investors face reduced systemic risk since the asset survives independently of any single chain.
- Blockchains must compete to host high-value assets — reversing the historical dependency.

### 3. Why Tokens Now Outweigh Blockchains

In the early blockchain era, **blockchains were the primary brand**, and tokens were defined by the networks they lived on.

With ORC-55 and similar innovations, the balance has shifted:

- **Value resides in the asset, not the chain.** Users and markets follow the token's brand, utility, and economic policy — not the underlying ledger.
- **Chains are now service providers** to tokens, competing on speed, fees, security, and developer support.
- If a blockchain underperforms, the asset simply continues on other chains without losing its market position.
- **Power shifts to the token issuer and holders**, not the chain maintainers.
- This creates a **sovereign asset class** — where coins are not captive to infrastructure and can exist, unaltered, across multiple execution environments.

With ORC-55, BZR becomes chain-independent by design, ensuring that it remains the same asset wherever it operates.

### 4. Background on ERC-20

ERC-20 has been the dominant fungible token interface since 2015, but it was not designed for:

- Cross-chain survivability
- Immutable governance
- On-chain authenticity verification
- Enforced monetary discipline

As a result, ERC-20 implementations are often vulnerable to:

- Chain dependence
- Administrative control over supply
- Approval race-condition exploits
- Off-chain reliance for authenticity

## 5. ORC-55 Overview

ORC-55 introduces:

- **Immutability:** No upgrades, no mints, no admin control.
- **Deflationary Supply:** Supply can only decrease through burns; total burned and circulating supply tracked on-chain.
- **Multi-Chain Survivability:** Same contract address across all supported chains; asset remains valid even if a chain fails.
- **On-Chain Authenticity:** ERC-5267 metadata and deployment hash for verification.
- **Immediate Scale:** BZR's simultaneous deployment on 10 major blockchains sets a precedent for launch readiness and reach.

## 6. Key Technical Features

1. **Multi-Chain Deployment:** Same address across all supported blockchains; deployed on Ethereum, BNB Chain, Base, Polygon, Arbitrum, Avalanche, zkSync Era, Cronos, Mantle, and Optimism at launch.
2. **Immutable and Zero-Admin:** No upgrade functions, minting, or privileged accounts.
3. **Deflationary Supply Model:** Transparent burn tracking and circulating supply reporting.
4. **Race-Condition-Resistant Allowances:** Zero-first or atomic allowance updates to prevent ERC-20 race exploits.
5. **On-Chain Metadata and Verification:** Implements ERC-5267 with version, standard, ABI hash, and feature list.

## 7. Benefits Over ERC-20

Feature	ERC-20	ORC-55
Chain Dependence	Bound to one blockchain	Same address across chains; survives chain failure; launched on 10 chains
Administrative Risk	Often mintable or upgradeable	Immutable, zero-admin
Supply Policy	Often inflationary or variable	Fixed, deflationary only

Approval Security	Vulnerable to approval race conditions	Race-proof
Authenticity Verification	Requires off-chain validation	On-chain metadata & deployment hash
Transparency	Limited to transfers and balances	Built-in supply and feature reporting

## 8. Security & Quantum Resilience

- **Multi-chain architecture** means all host chains must be compromised simultaneously to destroy the asset.
- **Diverse consensus mechanisms** across chains provide resistance against quantum computing threats that might impact a single network's cryptography.
- **Immutable code** eliminates governance or proxy attack vectors.
- **Minimal attack surface** — no external calls in token logic.

## 9. Multi-Chain Single Identity

- One brand, one identity — same contract address on all chains.
- Eliminates the need for wrapped tokens or third-party bridges.
- Maintains unified liquidity and reduces fragmentation.
- Simplifies integration for exchanges, wallets, custodians, and payment processors.

## 10. Integration Benefits for Exchanges

- List once; support multiple chains without additional contracts.
- Unified deposit/withdrawal logic with reduced operational overhead.
- Easier compliance and monitoring due to single canonical asset identity.
- Users benefit from predictable and transparent chain selection.

## 11. Strategic Importance for the Industry

Bazaars is the **pioneer** of ORC-55:

- First standard of its kind

- First live deployment (BZR)
- First to launch **simultaneously on 10 chains**
- Sets a new operational model for blockchain assets where coins can survive and thrive across multiple networks.

## 12. Conclusion

ORC-55 is a transformative token standard that shifts the industry from chain dependency to asset sovereignty.

BZR proves the model in production — immutable, deflationary, and present on 10 major blockchains from day one.

This brief serves as the **technical and strategic reference** for exchanges, partners, and regulators adopting ORC-55.