NST Finance – Official Whitepaper (v1.0)

1. Introduction

NST Finance is a multi-chain decentralized application (DApp) designed to revolutionize how donation-driven ecosystems and node-based incentive networks operate. By combining transparent blockchain technology, referral-based growth, and sustainable tokenized rewards, NST Finance provides a secure, scalable, and fair environment for contributors, node operators, and community members.

NST Finance begins on the BNB Smart Chain (BSC), using USDT/USDC as the primary stablecoins, and will expand to multiple EVM-compatible chains and Solana in later phases.

2. Vision & Mission

NST Finance aims to create a decentralized, transparent, and incentive-driven donation ecosystem where:

■ Contributors can support initiatives with verified on-chain transactions.

■ Community members can earn rewards by referring others.

■ Participants can grow their influence through node ownership.

■ All data remains verifiable, immutable, and visible on the blockchain.

Our mission is to provide the most transparent donation + node incentive model in Web3, ensuring that every contribution, reward, and node distribution is publicly auditable and verifiable.

3. Core System Overview

NST Finance consists of four major components:

1. Donation Engine

2. Node Sales & Distribution

3. Referral Reward System

4. NST Token Reward Module

These components interact seamlessly under a single smart contract architecture, ensuring accurate data accounting and tamper-proof operations.

4. Blockchain & Multichain Strategy

4.1 Phase 1 – BSC Deployment

NST Finance initially launches on BNB Smart Chain due to:

■ Low transaction fees

■ High TPS

■ Strong user adoption

■ Excellent stablecoin liquidity

Supported tokens:

■ USDT (BEP-20)

■ USDC (BEP-20)

4.2 Phase 2 – Multi-Chain Expansion

NST Finance will expand to:

■ Ethereum Mainnet

■ Arbitrum

■ Polygon

■ Avalanche

■ Solana (via a separate on-chain Program)

Each chain will have:

■ A dedicated treasury address

■ Identical business logic

■ Unified backend indexing

5. User Roles & Identity System

5.1 Regular User

A wallet address that has connected but has not donated or purchased any nodes.

5.2 Donor

A user with at least one valid donation of 100 USD or more.

5.3 Node Holder

A user qualifies as a node holder if:

■ They purchased $\geq$ 1 node, or

■ They have donated $\geq$ 2000 USD (eligible for an automatic upgrade node)

Each address may own up to 5 nodes in total.

6. Donation Mechanism

6.1 Minimum Donation

The minimum valid donation is 100 USD. Donations below this threshold are rejected or classified

as invalid.

6.2 Donation Tracking

All donations must store:

■ Chain

■ Token

■ USD value

■ User address

■ Timestamp

■ Source (donation or node module)

6.3 Donation Benefits

Donation amounts contribute to:

■ Identity upgrades

■ Automatic node upgrades

■ Referral reward calculations

7. Node System

7.1 Node Price & Limits

■ Price per node: 2000 USD

■ Max nodes per user: 5

■ Global supply: 100 nodes

7.2 Direct Node Purchase

Users may purchase 1–5 nodes at a time, respecting global and per-user limits.

7.3 Automatic Node Upgrade

Users automatically receive 1 free node when:

■ Total donations ≥ 2000 USD

■ Global node supply remains available

7.4 Node Acquisition Summary

Nodes can be obtained through:

■ Direct purchase

■ Donation upgrade

■ Referral milestones

8. Referral & Reward Ecosystem

NST Finance uses a single-level referral system.

8.1 Binding Referral

A user is permanently linked to a referrer only on their first wallet connection using:

https://nst.finance?ref=0x1234...

8.2 Node Referral Rewards

When a referred user becomes a node holder:

■ Referrer receives 500 NST

When referrer accumulates 10 direct node referrals:

■ Referrer receives 1 free node (up to the 5-node max)

8.3 Donation Referral Rewards

For every 1000 USD of cumulative donations from direct referrals:

■ Referrer receives 100 NST

There is no limit to NST rewards.

9. NST Token Reward System

9.1 Reward Accumulation

All rewards accumulate in a user's on-chain NST reward balance.

9.2 Pre-Launch (Claim Disabled)

Before NST token launch:

- claimEnabled = false
- Claim button disabled

9.3 Post-Launch (Claim Enabled)

After token deployment:

- Admin sets NST token address
- claimEnabled is true
- Users can claim their NST rewards

9.4 Claim Mechanism

The contract:

- Transfers NST from reward pool to user
- Sets user reward balance to zero
- Emits RewardClaimed event

10. Smart Contract Architecture

10.1 Contract Responsibilities

- Handle donations
- Handle node purchases
- Manage referral logic
- Track NST reward balances
- Safely route funds to treasury

10.2 Core Data Structure

struct UserInfo:

- totalDonationUSD
- nodeCount
- referrer
- directNodeCount
- directDonationUSD
- nstReward

10.3 Key Functions

- donate(token, amount, referrerHint)
- buyNode(token, count, referrerHint)
- claimNST()

10.4 Admin Functions

- setTokens()

- enableClaim()

- setTreasury()

11. Backend Architecture

11.1 Indexer

Backend listens to all contract events:

- Donations

- Node purchases

- Upgrades

- Referral rewards

- NST claims

11.2 Database (PostgreSQL)

Tables include:

- users

- donations

- nodes

- nst_rewards

- referrals

- leaderboard_snapshots (optional)

11.3 API Services

- User dashboard data

- Node statistics

- Referral statistics

- Global metrics

- Leaderboards

12. Frontend Architecture

12.1 Tech Stack

- Next.js

- React

- TailwindCSS

- wagmi + viem

12.2 Core Pages

- Home

- Donate

■ Node Sale

■ Dashboard

■ Leaderboard

13. Roadmap

Phase 1 – MVP

■ BSC deployment

■ Smart contract v1

■ Donation + Node + Referral system

■ Basic indexer + dashboard

Phase 2 – Expansion

■ Multi-chain support

■ Full leaderboards

■ Multi-language UI

■ Enhanced admin system

Phase 3 – Ecosystem Development

■ NST token launch

■ Governance mechanisms

■ Mobile app

14. Legal Notice

This whitepaper does not constitute financial advice or a token sale document. NST Finance provides decentralized infrastructure and is not responsible for user investment decisions. Participation is voluntary and fully at the user's discretion.

15. Conclusion

NST Finance aims to build the most transparent and sustainable donation-driven Web3 reward ecosystem. Through nodes, referrals, and token incentives, NST Finance creates a long-term value structure powered entirely by blockchain verification and community engagement.

16. Points Contribution & Airdrop Reward System

NST Finance introduces a long-term, gamified points incentive model to reward contributions, referrals, and ecosystem activity.

16.1 Points Earning Rules

• Donations: every 1000 USDT donated = 1000 points

• Node Holders: earn DOUBLE points on every donation

• Referral Donations: referrer earns additional contribution-based points

16.2 Monthly Rankings (Automatic: every 10th and 20th)

A. Fastest Growth Top 20

Based on % increase from previous snapshot.

Example: 100 → 1000 (+900%), 2000 → 3000 (+50%).

Top 20 receive NST airdrops.

B. Highest Points Top 20

Top 20 highest cumulative points also receive NST airdrops.

Monthly airdrops occur twice.

16.3 Frontend Flow

Dashboard displays:

• My Points

• "Apply for Airdrop" button

Upon applying:

1. If not in Top 20 → "Not eligible."

2. If eligible → "Airdrop successfully claimed."

16.4 Future Expansion

All future ecosystem actions will generate points, including:

• Staking

• Governance participation

• NFT utilities

• Node uptime

• Marketplace actions