



SlenSocial Whitepaper

An Ethereum-centered decentralized social network

Based on Traditional Chinese V1.1 · October 19, 2026

REVIEW DRAFT: English reading edition adapted from the supplied Traditional Chinese document. Intended for review, not yet an independently verified or certified translation. Contract claims, audits, legal status and live figures must be checked separately.

Built on Transparency. Designed for Permanence.

Executive summary

SlenSocial is an Ethereum-centered decentralized social application that treats each formally published text, image or video post as an ERC-721 NFT created by an on-chain transaction. A draft or preview is not a published post. Ethereum records the NFT and associated interactions; Arweave, accessed through Irys, hosts media and metadata; the user operates a self-custodial wallet. SLEN may be involved in selected support and settlement flows.

This discussion is based on reviewed source code, product materials and the stated every-post-is-an-NFT decision. Code presence does not guarantee that every feature is deployed, available or independently audited. Contract terms and fees must be checked on Mainnet.

Product website: <https://tommyslen.com>. Ethereum Mainnet chain ID: 1. Publisher: SlenSocial / SLEN Protocol.

01 / Mission: creation and connection first

The core is enduring social behavior: create, publish, appreciate, respond, collect and support. An NFT can establish an independently checkable record of provenance and ownership; it does not automatically provide an audience, revenue or copyright.

The long-term principles favor creative expression before speculation, user approvals before custodied control, precise rules before decentralization slogans, and open participation through common Ethereum standards.

01A / Long-term design principles

Not everything we share needs to be sold. Some things are simply worth remembering.

- Stable product scope: once core features work, prioritize security fixes, accessibility, compatibility, incident recovery and necessary maintenance over chasing trends.
- Social before trading: NFT creation is required for formal publication, but selling, transferring or auctioning posts is optional.
- Uploaders pay storage: creators bear Arweave/Irys one-time media/metadata storage quotes and Ethereum Gas, without a promise of unlimited platform subsidy.
- Operational cost discipline: domain registration, Cloudflare, RPC, indexing, monitoring and support remain real expenses; no permanent uptime or unlimited subsidy is assured.
- Maintainability: readable source, documentation, backups and handoff practices could help future maintainers, but do not ensure succession or automatic transfer of operational credentials.
- Immutable contracts require caution: frontend improvements do not rewrite prior smart contracts. An irreversible flaw may be hard to correct.

02 / The four-layer system

Ethereum and ERC-721 handle posts, ownership and on-chain interactions, with Gas costs. Arweave and Irys store media and NFT JSON metadata, with network or gateway availability limits. The SlenSocial frontend provides Feed, Shorts, Slen Pay, SLEN, Market and Profile; it remains dependent on sites and RPC services. SLEN and LUSD support selected payment workflows and have separate financial risks.

A typical publish flow connects a wallet, prepares content, pays an Irys/Arweave upload quote, uploads media and metadata, obtains an ar:// identifier, and signs createPost on Ethereum. An upload can succeed even when NFT creation fails, which calls for recoverable receipts instead of duplicate charges.

03 / Every formal post becomes an NFT

A successful SocialNFT.createPost transaction defines a published post; there is no separate public plain-database post mode under this product decision. Text posts, pictures, multi-image galleries and videos follow the publication workflow. Uploaded media and NFT tokenURI metadata can reference Arweave records. A token existing on Ethereum does not mean a particular media gateway will always display bytes instantly.

04 / User-paid Arweave storage

SlenSocial seeks to avoid treating user media as an open-ended storage subsidy for the operator. The current design obtains per-upload Irys fees and may require users to fund an Irys balance in ETH, verify upload receipts, then mint NFTs. Arweave storage expense is separate from Ethereum Gas and any approval fee. One-time payment is not a guarantee of permanent accessibility. Permanence also makes mistakes, leaked data and copyright violations difficult to undo.

05 / Identity and social relationships

Wallet addresses underpin accounts, profiles, unique usernames, following, likes and comments. Public blockchain activity can often be correlated; a wallet is not automatically anonymous. Reviewed source code describes potential re-registration of names after 730 days of qualifying inactivity, subject to deployment confirmation. ENS and similar names are convenience tools, not proof that addresses cannot change.

06 / NFT ownership versus intellectual property

Original creator, current ERC-721 token holder and copyright holder may be different parties. Trading an NFT does not automatically assign underlying copyrights or music licenses. Reviewed contract source indicates that only a post's author can remove it from the social Feed; if the NFT was transferred, the buyer may keep their token while the post is marked deleted. This does not guarantee removal of the media from Arweave.

07 / Slen Pay, SLEN and creator support

Slen Pay is an asset and payment gateway. The SLEN token's LUSD reserve relationship does not guarantee a permanent dollar exchange price or a financial return. In the examined SocialNFT source, `tipPost(tokenId, amount)` sends SLEN to the NFT's current owner rather than necessarily the original author, and a 0.30% protocol fee appears in addition to the tip, rounded upward. These details differ from an earlier direct-to-author concept and must be independently compared with deployed code and user-facing quotations.

Wallet transfers, ERC-20 approvals, SLEN mint/redeem operations, swaps, Irys charges and Gas must be distinguished. Publishing or holding SLEN does not automatically generate profit.

08 / NFT Market: sales and auctions

The reviewed NeoMarketplace code covers fixed-price sales and auctions and appears to restrict accepted NFT collections to its designated SocialNFT contract. Buyers and sellers require correct approvals, balances, fees and on-chain confirmations. A defined 30-basis-point (0.30%) marketplace fee is charged on top of the stated trade price: a nominal 100 SLEN item would therefore cost about 100.3 SLEN plus Gas, subject to token-unit rounding rules. Auctions can expose bids, locked balances, timing and refunds to contract risks. NFT sales and liquidity are not guaranteed.

09 / Content moderation and privacy

Decentralization does not eliminate legal obligations or the need to hide unlawful, infringing or abusive content. Hiding content in the website does not delete on-chain records or remove Arweave bytes. Reviewed repository materials included a Moderation Registry design marked as test-only and not deployed; it must not be presented as an active on-chain arbitration system. Public addresses, NFT trades and follows can reveal relationships. Do not upload private keys, seed phrases, unconsented personal data or content you cannot legally publish.

10 / Security and availability limits

Smart-contract faults and irreversible rules, network Gas and congestion, Arweave/Irys gateway outages, wallet attacks, SLEN/LUSD peg and reserve risks, centralized website access, copyright disputes, tax or regulatory differences may all affect users. Verifiability does not mean guaranteed uptime, correct pricing, absence of infringement or zero vulnerabilities. This is not a security audit, securities offering, legal opinion or investment endorsement.

11 / Product status and operational continuity

Reviewed source included implementations of Feed, NFT posts, galleries, Shorts, profiles, wallet and marketplace; actual Mainnet and cross-device readiness requires live testing. iOS wrapping and store submission must not be described as an already launched App Store release. The maintenance goal is to focus on existing functionality and predictable costs rather than infinite expansion, while enabling a future competent operator to resume service if resources and permissions become available.

12 / Independently checkable references

SocialNFT ERC-721: 0x00F4752A406381F017a97163e69E2fEe34e59f89

NeoMarketplace: 0x6C74e6E8dA1A0a54eF71F87857Fc0DC3b18Bc99a

SLEN ERC-20: 0x78c8bF385224162Fac7cc8545333Fa1DEa4999c9

LUSD: 0x5f98805A4E8be255a32880FDeC7F6728C6568bA0

Website: <https://tommyslen.com> ; reviewed source location: <https://github.com/TommySlen/slensocial> ;
Arweave: <https://arweave.org> ; Irys: <https://docs.irys.xyz>. These addresses were referenced by the
examined frontend and were not independently compared against every runtime bytecode.

13 / Conclusion

An NFT-backed post may be a digital creative work with provenance, history and an owner; its social value comes from human relationships, not perpetual speculation. Publishing is technically coupled with minting, while buying and selling are not required. Your content. Your ownership. Your keys. Your social. Your control.

Document scope: discussion of protocol, product, brand or risks; not financial, legal, tax or investment advice and not a substitute for an independently commissioned security audit.