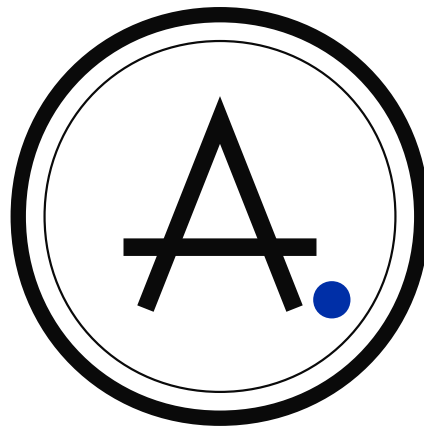




ALTCOINS.IO

THE INTELLIGENCE LAYER FOR SOLANA'S LONG TAIL

A technical description of a real-time asset-intelligence network — the detection, decoding and risk-scoring of every token on Solana within one slot of its existence, committed on-chain as attestations that any protocol may verify and compose with.

SPL · \$ALTS

REAL-TIME RISK

STAKE-FOR-ACCESS

1.0B

FIXED SUPPLY — NO
INFLATION

<1 SLOT

MINT→INDEX
DETECTION TARGET

60%

NET REVENUE TO
BUYBACKS

15.5%

CIRCULATING AT TGE



00 — ABSTRACT

The long tail is the market.

On Solana, tens of thousands of new SPL tokens are minted every day. The overwhelming majority of trading venues, wallets and aggregators treat this long tail as undifferentiated noise: assets appear with no provenance, no risk context, and no machine-readable signal until long after the window of relevance has closed. Retail participants absorb the resulting information asymmetry as losses; professional desks re-build the same ingestion infrastructure privately, at great cost, over and over.

ALTCOINS.IO is purpose-built infrastructure that closes this gap. The network ingests raw Solana state at the Geyser interface, decodes every token mint, pool creation and liquidity event in real time, and scores each asset with **SIGNAL** — a composite risk model spanning contract authorities, liquidity structure, holder distribution, deployer lineage and momentum. Scores and the features behind them are streamed to subscribers with sub-second latency and periodically committed on-chain as Merkle attestations that other Solana programs can verify and compose with.

Access to the network is mediated by **\$ALTS**, a fixed-supply SPL token. Staking \$ALTS unlocks metered API capacity, firehose streams and terminal tiers; a programmatic share of platform revenue market-buys \$ALTS on-DEX, with purchased tokens split between permanent burn and staker rewards. The token is therefore a claim on *access* to the network first, with value accrual mechanically coupled to usage — not to emissions.

01 — DESIGN PRINCIPLES

LATENCY IS THE PRODUCT

Every architectural decision is subordinated to one constraint: an asset must be detected, decoded and scored before its first candle closes. Target budget: <1 slot to index, <2 s to first score, <3 s to subscriber alert.

NO EMISSIONS THEATER

Supply is fixed at 1B. There is no inflation lever. Usage rewards are a finite, decaying allocation — the steady-state token flow is revenue-funded buybacks, not printing.

SCORES MUST BE COMPOSABLE

A risk score that lives in a UI is a feature; a risk score verifiable on-chain is infrastructure. ALTS-Attest publishes score commitments so lending markets, launchpads and wallets can gate behavior programmatically.

DATA BUSINESS, NOT CUSTODY

The protocol never takes custody of user trading funds. The only value-bearing program is the staking vault, minimizing attack surface and regulatory ambiguity.

02 — MARKET CONTEXT

Asymmetry at 400 ms

Solana's execution characteristics — ~400 ms slots, sub-cent fees, and permissionless token issuance through bonding-curve launchpads — have produced the highest asset-creation velocity in crypto history. This is not a bug to be engineered away; it is the substrate of a new market structure in which **time-to-information** is the dominant edge.

30K+

NEW TOKENS / DAY, TYPICAL
(MID-2026)

~400ms

SLOT TIME — THE
INFORMATION CLOCK

MINUTES

MEDIAN RELEVANCE WINDOW
AT LAUNCH

2.1 — THE THREE FAILURES OF EXISTING TOOLING

Latency failure. Indexers built on polling RPC or third-party APIs observe launches seconds to minutes late. On a 400 ms clock, that is not a delay — it is a different market.

Context failure. Price and volume are trivially available; *provenance* is not. Whether a deployer wallet was funded by a cluster responsible for prior exit scams is knowable on-chain, but no mainstream surface computes it at detection time.

Composability failure. Risk intelligence today terminates in dashboards. Programs cannot condition on it. A lending market cannot refuse collateral below a risk threshold; a launchpad cannot require a minimum deployer score — because no verifiable on-chain risk primitive exists.

2.2 — WHO PAYS FOR THIS

SEGMENT	NEED	MONETIZATION
Active traders	Launch detection, rug filtration, smart-money flow	Terminal subscriptions
Trading bots / snipers	Sub-second structured firehose	Metered WS + staked tiers
Protocols (lending, launchpads, wallets)	Verifiable risk primitive	ALTS-Attest integration licensing
Funds & market makers	Historical archive, wallet clustering, bulk export	Institutional seats + data licensing

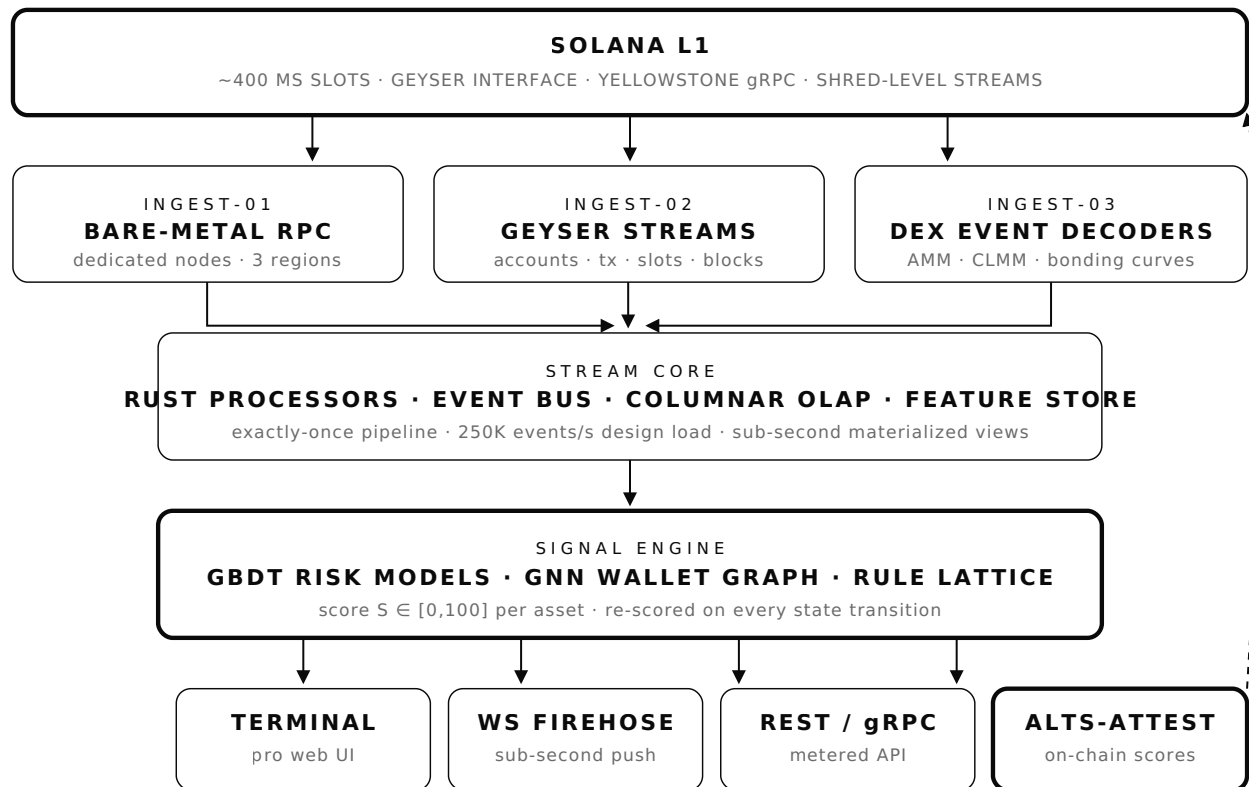
The addressable spend is the aggregate of what these segments currently pay for fragmented RPC infrastructure, private indexers and manual research — consolidated into one metered network with a single unit of account for access: staked \$ALTS.



03 — SYSTEM ARCHITECTURE

From shred to signal

The stack is organized as a strict pipeline with one-way data flow and per-stage latency budgets. Ingestion consumes Solana state directly at the Geyser plugin interface over Yellowstone gRPC from operator-run bare-metal nodes — no third-party data dependency exists on the hot path.



Dashed return path: SIGNAL commitments are posted back to Solana via the ALTS-Attest program, closing the loop between off-chain computation and on-chain verifiability.

3.1 — INGESTION MESH

Three redundant bare-metal regions run validator-adjacent nodes with the Geyser plugin exporting account writes, transactions and slot status over gRPC. Event decoders normalize venue-specific instructions — AMM pools, concentrated liquidity positions, bonding-curve launches — into a unified schema. Design load is **250K events/s** sustained with exactly-once semantics into the event bus.

3.2 — STREAM CORE

Rust stream processors maintain materialized views keyed by mint: liquidity depth curves, holder tables, deployer graphs, flow aggregates. State lives in a columnar OLAP store for historical queries and an in-memory feature store for the models' hot path. Every state transition triggers incremental re-scoring rather than batch recomputation.

3.3 — SIGNAL ENGINE

SIGNAL is an ensemble: gradient-boosted decision trees over per-asset tabular features, a graph neural network over the wallet-funding graph for deployer lineage, and a deterministic rule lattice for hard disqualifiers (e.g. active freeze authority with concentrated supply). The ensemble emits a score $S \in [0, 100]$ plus per-factor attributions, so every score is explainable at feature granularity.

```
S(mint, t) =  $\sum_k w_k \cdot S_k(\text{mint}, t)$  // k ∈ {AUTH, LIQ, DIST, DEP, MOM}
w = (0.20, 0.25, 0.20, 0.20, 0.15) // governance-tunable weight vector
```

FACTOR	WEIGHT	REPRESENTATIVE FEATURES
AUTH — Contract	0.20	Mint/freeze authority status, metadata mutability, Token-2022 extension flags (transfer hooks, fee configs)
LIQ — Liquidity	0.25	LP lock/burn ratio, depth at $\pm 2\%$, pool age, LP provider concentration
DIST — Distribution	0.20	Top-10 holder share, Gini coefficient, sniper share of first-N slots, bundled-buy detection
DEP — Deployer	0.20	Funding-source lineage, prior-incident recidivism, GNN embedding distance to known-scam clusters
MOM — Momentum	0.15	Net-flow z-score, unique-buyer velocity, early-holder retention

3.4 — ALTS-ATTEST: THE ON-CHAIN RISK PRIMITIVE

Each epoch (target: 60 s), the network commits a Merkle root of (mint, score, factor vector) tuples to the ALTS-Attest program. Any Solana program can verify an inclusion proof against the posted root and gate logic on it — a lending market refusing collateral with $S < 40$, a launchpad requiring deployer sub-score $DEP \geq 60$, a wallet surfacing warnings natively. Attestation consumers pay integration fees denominated in \$ALTS, creating direct protocol-level token demand.

STAGE	LATENCY BUDGET (DESIGN TARGET)
Mint / pool creation → indexed	< 1 slot (~400 ms)
Indexed → first SIGNAL score	< 2 s
Score → subscriber alert (WS push)	< 3 s
Score set → on-chain attestation root	≤ 60 s epoch

04 — TOKEN UTILITY

Stake for access. Usage buys the float.

\$ALTS is a fixed-supply SPL token with three functions: it is the **access key** to the network's metered capacity, the **settlement asset** for discounted payments and attestation licensing, and the **governance weight** over protocol parameters. There is deliberately no fourth function: \$ALTS is not collateral, not a stable asset, and confers no claim on any entity's equity or profits.

4.1 — STAKE-FOR-ACCESS TIERS

TIER	STAKED \$ALTS	API RATE	WS STREAMS	ALERT SLOTS	HISTORY
SCOUT	0	60 req/min	1	3	30 days
ANALYST	25,000	600 req/min	5	25	12 months
PROFESSIONAL	250,000	6,000 req/min	25	250	Full archive
INSTITUTIONAL	2,500,000	Custom SLA	Dedicated shard	Unlimited	Full + bulk export

Tier thresholds are governance-tunable within bounds. Staking is non-custodial via the ALTS-Vault program; positions are withdrawable subject to a 7-day cooldown. Access staking carries no slashing.

4.2 — LOCK MULTIPLIERS

Stakers may optionally time-lock positions. Locking scales both governance weight and the staker's share of the buyback reward pool:

```
weighti = stakei · m(locki)    // m: none = 1.00 · 3 mo = 1.20 · 6 mo = 1.50 · 12 mo = 2.00
```

4.3 — PAYMENT RAILS

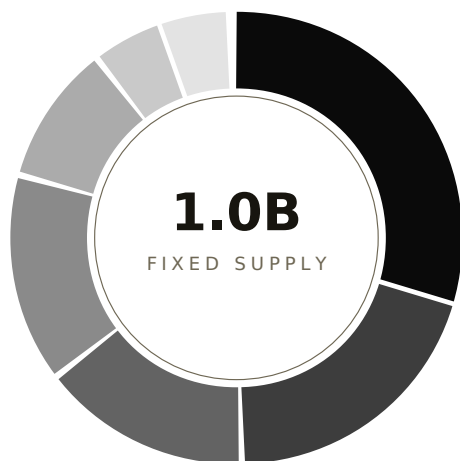
- **Subscriptions & API metering** — payable in USDC or \$ALTS; paying in \$ALTS applies a protocol-wide **20% discount**, routing organic demand through the token.
- **Attestation licensing** — protocols consuming ALTS-Attest proofs pay integration fees denominated in \$ALTS.
- **Alert marketplace** — community-authored signal recipes are listed and settled in \$ALTS with a protocol take rate that flows into the buyback pool.

WHAT \$ALTS IS NOT

No inflation funding "APY". No revenue promises. No equity claim. Reward flow to stakers derives exclusively from tokens the protocol has already bought on the open market out of realized platform revenue.

05 — SUPPLY & ALLOCATION

1,000,000,000. Fixed.



Usage Rewards	30%	300.0M
Core Contributors	20%	200.0M
Strategic	15%	150.0M
Treasury (DAO)	15%	150.0M
Genesis Airdrop	10%	100.0M
Liquidity & MM	5%	50.0M
Public Launch	5%	50.0M

HARD INVARIANTS

- Mint authority burned at TGE — supply can never increase.
- Insider allocations (contributors + strategic = 35%) carry a 12-month cliff; nothing unlocks before month 12.
- Community-directed supply (rewards + airdrop + treasury = 55%) strictly exceeds insider supply.

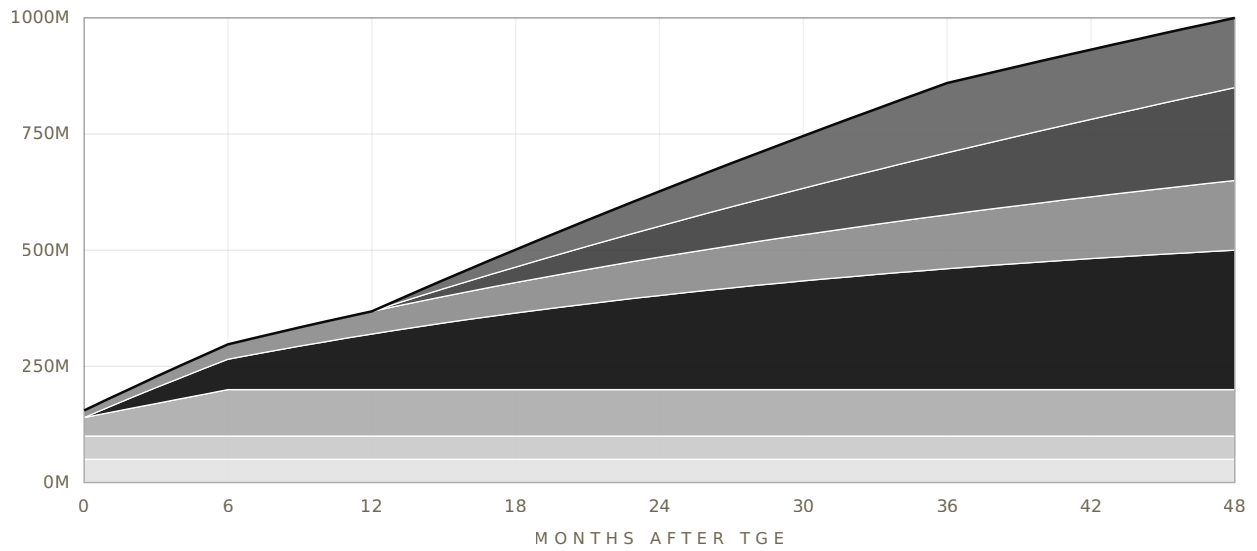
5.1 — VESTING TERMS

BUCKET	SIZE	TGE UNLOCK	SCHEDULE
Public Launch	50M	100%	Fully unlocked
Liquidity & MM	50M	100%	Deployed to DEX/CEX liquidity ops
Genesis Airdrop	100M	40%	Remainder linear over 6 months
Usage Rewards	300M	0%	48-month geometric decay ($r = 0.97$)
Treasury (DAO)	150M	10%	Linear over 48 months, DAO-governed
Core Contributors	200M	0%	12-mo cliff, then 36-mo linear
Strategic	150M	0%	12-mo cliff, then 24-mo linear

Circulating at TGE: **155M (15.5%)** — public + liquidity + airdrop tranche + treasury float. All vesting enforced by on-chain streaming contracts; no admin fast-forward.



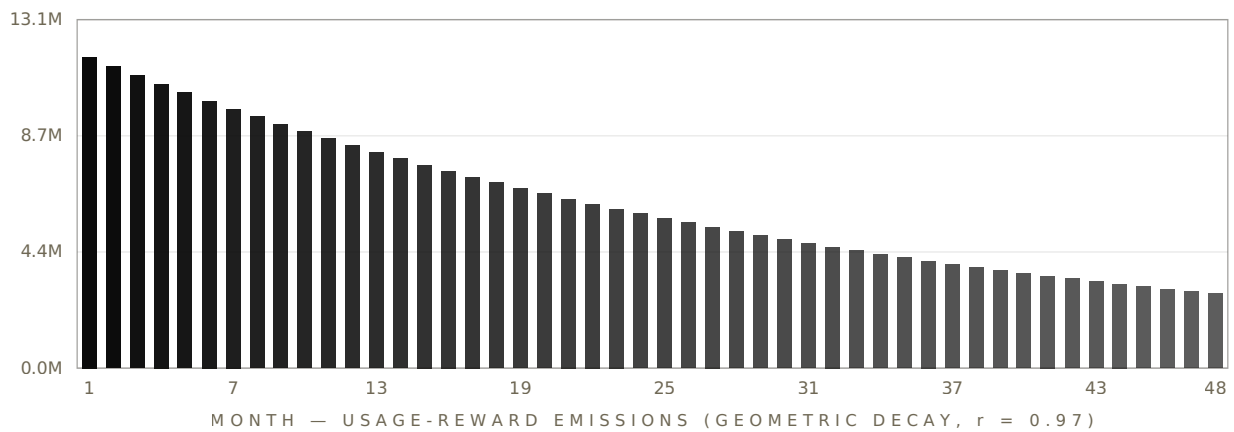
5.2 — CIRCULATING SUPPLY SCHEDULE



Public Liquidity Airdrop Usage Rewards Treasury Contributors Strategic

5.3 — USAGE-REWARD EMISSIONS

Usage rewards are the network's bootstrap subsidy: they accrue to measured, sybil-filtered usage — API consumption, terminal activity, alert-recipe authorship — not to passive staking. Emissions decay geometrically and terminate at month 48; they are a finite bridge to the revenue-funded steady state, not a permanent faucet.

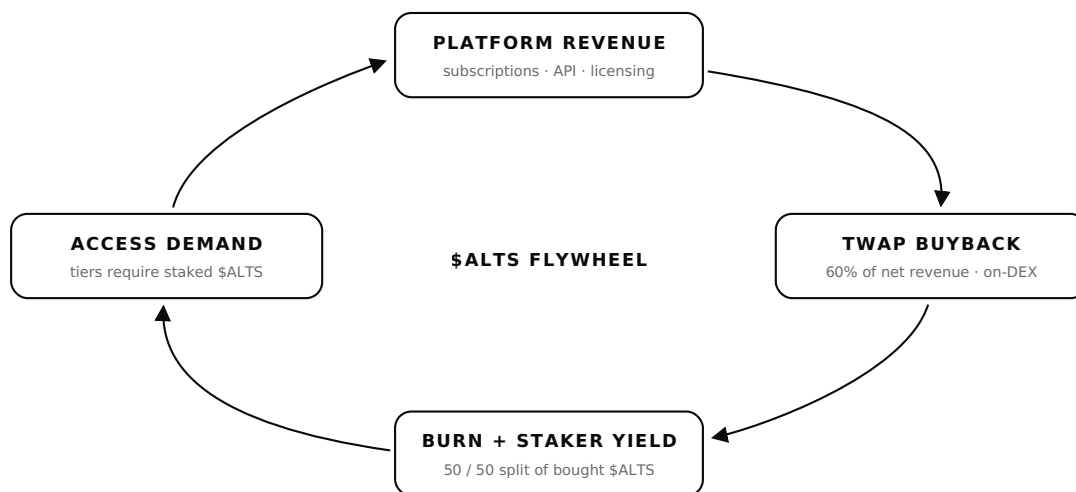


$$E_t = E_0 \cdot r^t \quad r = 0.97, \quad E_0 \approx 11.7M \quad // \quad \sum E = 300M \text{ over 48 months} \cdot \text{month-1 emission} \approx 11.7M \text{ (1.17\% of supply)}$$

06 — VALUE ACCRUAL

Revenue → buyback → burn + yield

Value accrual is mechanical, on-chain, and independent of narrative. Sixty percent of net platform revenue — subscriptions, API metering, attestation licensing, marketplace take — is routed each week to a buyback executor that market-buys \$ALTS on-DEX via aggregated routes, using randomized TWAP child orders to minimize slippage and MEV exposure.



6.1 — SPLIT POLICY

PHASE	CONDITION	BURN	STAKER REWARDS
Phase I	cumulative burn < 100M (10% supply)	50%	50%
Phase II	cumulative burn ≥ 100M	25%	75%

Split ratios and the revenue share are governance-tunable within charter bounds (revenue share floor: 40%). All buyback transactions are executed by an auditable program-owned account; every burn is verifiable on-chain.

6.2 — WHY BUYBACK, NOT REVENUE-SHARE

Direct stablecoin fee distribution couples the token to securities-like cash-flow claims and drains working capital. Buyback keeps the flow in the token's own unit, compounds scarcity during Phase I, and preserves runway — stakers still receive the flow, as \$ALTS, proportional to lock-weighted stake.

6.3 — DEMAND STACK SUMMARY

SOURCE	MECHANISM	CADENCE
Access staking	Tiers require staked \$ALTS; capacity scales with stake	Continuous lockup
Payment discount	20% discount routes subscription flow through the token	Monthly
Attest licensing	Protocol integrations denominated in \$ALTS	Per-integration + usage
Buyback flow	60% net revenue market-buys on-DEX	Weekly TWAP
Burn	Phase I: half of all bought tokens destroyed	Weekly, on-chain



07 — GOVERNANCE & SECURITY

Narrow governance, hard invariants

7.1 — GOVERNANCE SCOPE

Governance is deliberately narrow: lock-weighted stakers vote on a bounded parameter registry, not on arbitrary code. Upgradable parameters include tier thresholds, SIGNAL weight vector w , buyback split within charter bounds, and treasury grants. Invariants outside governance reach: total supply, the burned mint authority, vesting schedules, and the 40% revenue-share floor.

PARAMETER	MECHANISM	VALUE
Proposal threshold	min lock-weighted stake	0.5% of staked supply
Quorum	participating weight	4% of staked supply
Timelock	execution delay	48 h (7 d for fee params)
Vote weight	stake $\times$ lock multiplier	$m \in [1.0, 2.0]$

7.2 — PROGRAM SURFACE

PROGRAM	FUNCTION	VALUE AT RISK
ALTS-Vault	Non-custodial staking, tiers, cooldown	Staked \$ALTS
ALTS-Buyback	TWAP execution, split policy, burn	Weekly revenue tranche
ALTS-Attest	Score-root commitments, proof verification	None (data only)
ALTS-Gov	Parameter registry + timelock	Config only

All programs are built with Anchor, undergo two independent audits before mainnet, and launch under a published bug bounty. The data plane holds no user funds; the maximum on-chain value at risk is the staking vault.

7.3 — MODEL GOVERNANCE

SIGNAL model versions are content-addressed and announced on-chain before activation; attestations reference the model hash, so any consumer can pin, audit, or lag upgrades. A public harness tracks precision/recall against realized outcomes; regressions revert automatically.

7.4 — ROADMAP

Q4 2026	TERMINAL BETA	Public Terminal beta on Solana mainnet; points program begins accruing airdrop weight.
Q1 2027	TGE + STAKING	\$ALTS generation event; genesis airdrop; access tiers activate.
Q2 2027	API GA + ATTEST	Metered API + firehose GA; ALTS-Attest live on-chain.
Q3 2027	PRO TOOLING	Backtesting, cohort explorer, mobile terminal, alert marketplace.
2028	DATA NETWORK	Licensing desk, additional venues, community model registry.

08 — RISK FACTORS & LEGAL NOTICE

Read this page.

8.1 — RISK FACTORS

- **Conceptual stage.** This document describes a protocol design. Figures, latency targets, tiers and schedules are design parameters, not measurements of a live system, and may change materially before or after any launch.
- **Model risk.** SIGNAL scores are probabilistic. False negatives will occur; a high score is not a recommendation, endorsement, or guarantee of any asset's behavior.
- **Smart-contract risk.** Audited code can still fail. Staked tokens could be lost to defects despite audits and bounties.
- **Market risk.** \$ALTS may lose some or all of its value. Buyback mechanics do not create a price floor and do not guarantee appreciation.
- **Regulatory risk.** The legal treatment of utility tokens, staking and data services varies by jurisdiction and is evolving. Access may be restricted in certain jurisdictions.
- **Dependency risk.** The network depends on Solana liveness, the Geyser interface, and DEX liquidity for buyback execution.

8.2 — LEGAL DISCLAIMER

This whitepaper is a conceptual design document prepared for discussion purposes. It is not an offer to sell or a solicitation of an offer to buy any token, security, or financial instrument in any jurisdiction. \$ALTS, if issued, is intended solely as a utility and governance token for accessing the ALTCOINS.IO network; it represents no equity, debt, dividend right, or claim on revenue or assets of any entity. Nothing herein constitutes investment, legal, accounting, or tax advice. Forward-looking statements — including latency targets, roadmap dates, and economic projections — involve known and unknown risks and may prove inaccurate. Digital assets are highly volatile; you may lose the entire value of any tokens you acquire. Prospective participants must conduct their own due diligence and consult their own advisers, and must not rely on this document as the basis for any decision. To the maximum extent permitted by law, the authors disclaim all liability arising from use of, or reliance on, this document.

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