UKIYO NETWORK · CREDIT & SETTLEMENT

SPOOL *Protocol* roadmap

Order NFTs · industry spools · score-linked advances

DRAFT V1.0 · IN PROGRESS (NOT PRODUCTION YET)
FILE: C:\ROADMAP\03-SPOOL-PROTOCOL-ROADMAP.HTML
ROLE: ANSWER "WHAT CREDIT FOLLOWS"

MISSION NOW MVP MECHANICS PHASES TICKETS MARKETS NEXT

1. Mission & boundaries

NEVER PRODUCES EVIDENCE · NEVER OWNS POLICY

Production-verified credit: mint Verified Order NFTs, fund industry spools, advance stablecoins when Agency-approved calls pass oracle-gated caps.

HOLDS	PRODUCES	NEVER DOES
NFTs, spool liquidity, outstanding, spreads	Credit positions, pauses, reprices, settlements	Invent scores; rewrite allowlists



2. Current state

BUILDING · LOCAL SPOOL MODEL

- Site + white paper live
- Local MVP in-memory mint/advance/reprice/pause/notify
- Solidity stubs: NFT, IndustrySpool, MockUSDC
- Missing: Sepolia deploy, Foundry CI, mainnet capital

> **Capital posture:** Sepolia + MockUSDC only until fail-closed drills + audits clear.

3. MVP scope (deep)

- One NFT per PO · Electronics spool only
- Actions: mint, advance, reprice, pause, notify
- maxAdvance from attested score · reject if Paused or age > 900s
- MockUSDC to supplier on advance

PARAMETER	MVP VALUE
Vertical	Electronics
PO / notional	PO-2026-0001 / $100,000
advanceRatioBps	4000 (40% at perfect score)
Freshness	900 seconds
Spread	50–2000 bps
Chain / asset	Sepolia 421614 / MockUSDC

4. Credit mechanics

```
maxAdvance = notional × advanceRatioBps × scoreBps / 10000 / 10000
```

Example: 100000 × 4000 × 9675 → ≈ $38,700 (may escalate above $25k auto-cap).

STATE	ENTRY	NEXT
Unminted	PO registered	mint → Active
Active	NFT minted	advance, reprice, pause, notify
Advanced	outstanding > 0	reprice, pause, notify, repay later
Paused	pause()	advance blocked

Fail-closed credit

- Oracle Paused / stale → maxAdvance 0
- Spool paused / unminted → advance reverts
- Duplicate mint → revert

5. Phases

PHASE 0 · SPEC + LOCAL

In-memory model + stubs + vertical tests.

PHASE 1 · WEEKS 3–4 · SEPOLIA

- Deploy NFT, spool, MockUSDC
- Wire score-based maxAdvance
- Foundry happy + fail-closed

PHASE 2 · MONTHS 3–4 · PILOT CREDIT

- Real supplier + notional
- Capped liquidity
- Utilization dashboards

PHASE 3 · MONTHS 5–8 · CONTINUOUS OPS

- Repayment waterfall
- Continuous reprice
- Buyer notify · richer lifecycle

PHASE 4 · MONTHS 9–12+ · MARKETS

- Mainnet limited LP
- Auto / Pharma spools
- Audit · Stylus path

6. Tickets

ID	WORK	WHEN
SPL-1	VerifiedOrderNFT mint-once	MVP
SPL-2	IndustrySpool Electronics	MVP
SPL-3	MockUSDC + fund	MVP
SPL-4	Score-linked maxAdvance	MVP
SPL-5	Foundry suite	MVP
SPL-6	Liquidity runbook	Phase 2
SPL-7	Utilization dashboards	Phase 2
SPL-8	Repayment waterfall	Phase 3
SPL-9	Order lifecycle	Phase 3
SPL-10/11	Auto / Pharma spools	Phase 4
SPL-12	LP tranches	Phase 4
SPL-13	Mainnet + audit	Phase 4
SPL-14	Stylus compute	Phase 4

7. Market expansion

VERTICAL	WHEN
Electronics	MVP → Phase 2
Auto	Phase 4
Pharma	Phase 4

Capital path: MockUSDC Sepolia → capped pilot → limited mainnet LP → open markets.

8. Next 2 weeks (after Oracle registry)

1. SPL-1–3 Sepolia deploy scripts
2. SPL-4 maxAdvance vs live registry
3. SPL-5 Foundry stale/pause/duplicate tests