

WHITE PAPER

Delivered Gold Ounce (DGO) · Version 1.0

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1. Executive Summary

The Delivered Gold Ounce (DGO) is the core unit of account of the 0x Real World Assets Mining Edition (0xRWAME) platform. One DGO represents one troy ounce of 99.9% refined gold that has been delivered to a nominated offtake partner and is held under the custody of the relevant onshore 0xRWAME Treasury entity. DGOs are minted only after verified physical receipt and multi-oracle validation.

DGOs are redeemable digitally only, through on-chain liquidity pools, for crypto or stablecoin. Physical delivery is outside the scope of the DGO instrument: a holder seeking physical gold must first convert the DGO into a Delivery Note (DNOTE)¹. The DNOTE is the termination point for any physical path. To retain gold weight digitally indefinitely with the option to redeem or take delivery at a later point, the path is to convert DGOs into Digital Gold Perpetuals (DGPerps)².

The DGO is a production-backed, burn-and-mint emission vehicle. Minting is gated on verified mine output that has passed chain-of-custody and oracle checks. Primary custody remains onshore in the mining geography; only settlement volumes required for platform liquidity may move to the offshore 0xRWAME Global Treasury. Each DGO carries a fixed 24-month lifespan from mint, origin-tagged metadata, and is subject to a non-redeemable two-year storage fee deducted at mint. Transfers are free of platform charge. The instrument is non-bridgeable outside its host blockchain and transferable only within a defined compliance envelope. DGOs are subject to clawback; builders of products around the DGO must treat clawback as a first-order design constraint.

Pricing is non-linear. Utility declines with remaining lifespan, so a newly minted DGO commands a different market value from an older DGO that represents the same quantity of gold. Digital redemption is designed as a steady-state process, not a trading or arbitrage venue. Where a holder registers for redemption at a price the ordinary liquidity pool cannot honour within an adequate time—including cases in which a material price spike has occurred and the holder seeks to capture that elevated spot—the platform routes the request to Billet Note (BNOTE)³ issuance rather than forcing settlement through the pool at a price that cannot be honored.

This white paper defines the DGO instrument, its tokenomics, pricing mechanics, issuance and ordinary digital-redemption processes, custody and security architecture, use cases, and conceptual scalability bounds. The DGO is an open emission tool: any gold mine that can satisfy dual-party attestation (secure offtake partner and treasury partner) may in principle emit DGOs.



2. Definition and Core Properties

2.1 Formal Definition

1 DGO = 1 troy ounce of 99.9% refined gold delivered to the nominated offtake partner and held as a gold-ounce owing under the onshore 0xRWAME Treasury. The DGO is a digital representation of that specific physical claim. It is not a fractional claim on a pooled vault in a distant jurisdiction, nor a derivative whose value depends on a futures curve.

2.2 Distinguishing Properties

- **Production-backed emission vehicle:** minting is gated on verified mine output that has passed chain-of-custody and oracle checks. The instrument is independent of any specific financing product or programme structure.
- **Onshore primary custody:** gold lands and is processed under onshore law; only settlement volumes required for platform liquidity may move to the offshore Global Treasury.
- **Finite lifespan:** each DGO is valid for exactly 24 months from its mint date (the DGO Lifespan).
- **Origin tagging:** each DGO carries provenance data including creation date, mine coordinates (GPS / GLONASS / BeiDou), offtake partner and reference, initial onshore Treasury location, oracle attestation, and IPFS hash of the production and compliance manifest.
- **Burn-and-mint architecture:** DGOs are created only against verified ounces and destroyed on digital redemption, conversion to a successor instrument, or lifespan expiry under the applicable rules.
- **Hard physical floor:** every outstanding DGO is matched by a corresponding ounce-owing recorded at the offtake partner.
- **Digital redemption only:** DGOs are redeemed for crypto or stablecoin via on-chain liquidity pools. Physical delivery requires conversion into a DNOTE. Where the pool cannot honour a registered redemption price within an adequate time, the platform issues a BNOTE instead. All exit paths burn the DGO; BNOTE, DNOTE and DGPerp are terminal states—there is no path back to a DGO.
- **Divisibility:** fractionalisation is supported (subject to technical and compliance minimums) while retaining identity and backing ratio, nominally to two decimal places.
- **Clawback exposure:** the platform may reverse a DGO from any wallet for non-compliance or under automated rules. Clawbacks are usually charged. Builders of products, marketplaces or financing structures around the DGO must design for clawback risk.



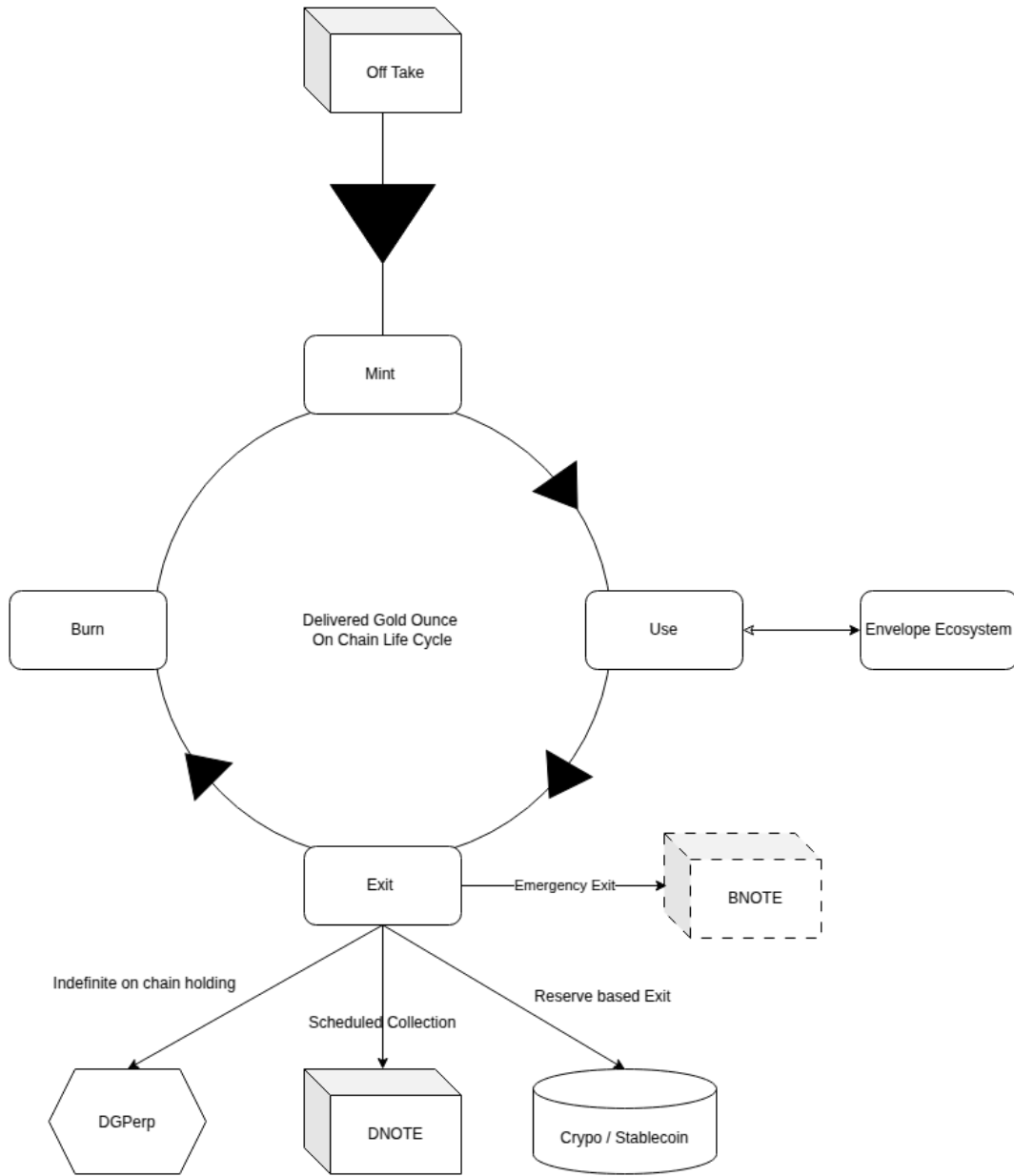


Figure 1 — DGO Lifecycle (Mint · Use · Burn)

All exit paths burn the DGO. BNOTE, DNOTE and DGPerp are terminal states—there is no path back to a DGO.



3. Why Gold — and Why This Form

The platform's choice of gold is architectural. Five properties that no other commodity simultaneously satisfies at the required scale and horizon underpin the design:

- No industrial consumption destruction of the realisable stock. Above-ground gold accumulates; industrial use is largely recoverable.
- Infinite divisibility without loss of value or identity.
- Universal individual and sovereign demand across geographies and use cases (central-bank reserves, personal savings, crisis hedge, regulatory capital).
- No credible substitution risk on a multi-decade horizon.
- Personal redeemability at points of presence once converted through the appropriate instrument.

The DGO form is chosen so that any gold mine—industrial or artisanal—that can present verified output to a secure offtake partner and a treasury partner may emit a standardised, origin-tagged digital claim without requiring the mine itself to maintain a geographical footprint in every end market.



4. Tokenomics

4.1 Supply Model

There is no fixed maximum supply. DGOs are issued dynamically against verified physical deliveries and destroyed on digital redemption, conversion to a successor instrument, or lifespan expiry. Outstanding supply at any moment equals cumulative verified ounces still held under onshore Treasury owing, less ounces that have been redeemed, converted, or that have reached Lifespan expiry under the applicable rules.

4.2 Fees

The following fee rules apply:

- **Mint-time storage and transport:** storage and transport fees are charged and deducted at mint. Each DGO incurs an automatic, non-redeemable two-year storage fee covering the full DGO Lifespan.
- **Transfers:** token transfers are free of platform charge (host-blockchain gas costs remain the responsibility of the transferring party).
- **Clawbacks:** clawbacks, depending on nature, are usually charged.

4.3 Lifespan and Dispute / Probate Handling

Each DGO is valid for exactly 24 months from its mint date. Before the end of this period the holder is obliged to select an exit route. If no exit route is selected by expiry, the DGO lapses under automated lifecycle rules.

In all cases of lapse—whether at natural expiry or under a dispute or probate regime that has not been otherwise ordered by the relevant authority—the following applies. Where funds are sufficient, Digital Gold Perpetuals (DGPerps)² are issued for the residual weight. Where funds are not sufficient, stablecoins are issued at the prevailing spot price. All resulting instruments or stablecoins are delivered to the holder's holding address.



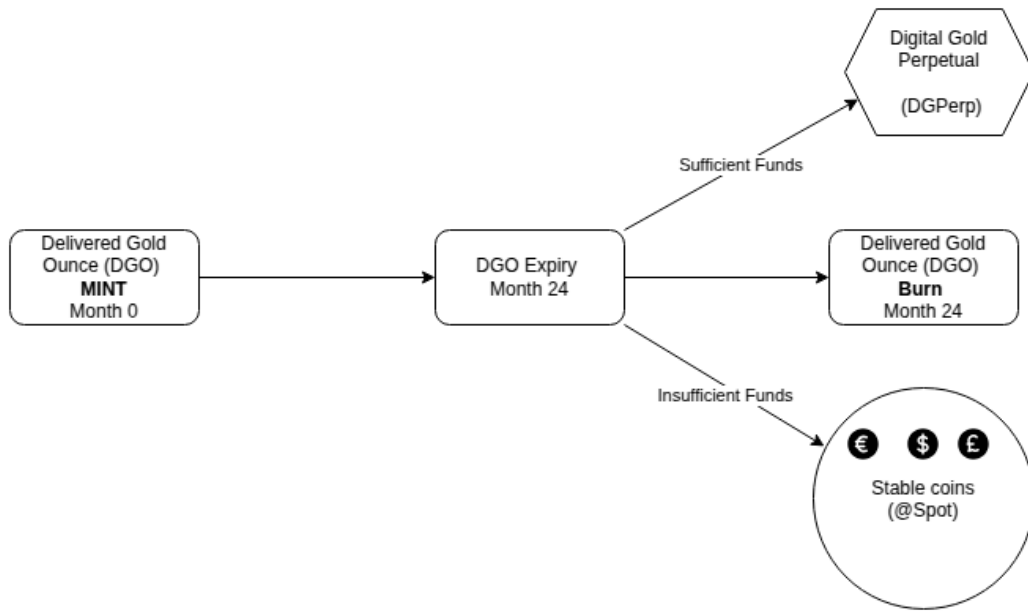


Figure 2 — DGO Expiry and Lapse Paths

At Month 24: sufficient funds → DGPerp; insufficient funds → stablecoins at spot. All proceeds go to the holding address.

All automated lifecycle activities—including expiry conversion, dispute or probate lapse, and related residual handling—operate via transparent clawback and re-issue. The DGO is clawed back from the holder’s wallet; the necessary conversions are performed and applicable charges applied; the resulting instrument or stablecoins are then re-issued to the holder together with a matching Settlement Note (SNOTE)⁴. The clawback-and-re-issue path is auditable on-chain and does not create an undocumented residual claim.

Builders of products, wallets and customer interfaces around the DGO must ensure that holders can retrieve lapsed funds from the holding address, and that clawback-and-re-issue events are surfaced clearly to the customer. Failure to provide retrieval paths for lapsed proceeds is a product defect, not a feature of the DGO instrument.

4.4 Transfer and Trading Controls

- DGOs may be freely transferred to compliant wallets within the compliance envelope.
- DGOs cannot be transferred to wallets outside the compliance envelope.
- DGOs may be traded on platform-sanctioned compliant marketplaces.
- DGOs cannot be traded on open decentralised-finance platforms.
- DGOs cannot be bridged out of their host blockchain.
- DGOs may be clawed back from any wallet for wallet non-compliance or under automated rules.



5. Pricing Mechanics

DGO pricing is non-linear with respect to remaining lifespan. Two DGOs that represent the same quantity of gold do not necessarily trade at the same price: a newly minted DGO has higher remaining utility than an older DGO approaching expiry.

5.1 Utility Function

Define remaining life fraction:

$$\tau = (T - t) / T$$

where $T = 24$ months (full lifespan) and $t =$ age in months since mint ($0 \leq t \leq T$). Thus $\tau \in [0, 1]$.

A simple utility weight that declines with age is:

$$U(\tau) = \tau^\alpha$$

where $\alpha \geq 1$ is a curvature parameter. When $\alpha = 1$, utility declines linearly; when $\alpha > 1$, utility declines more rapidly in the later portion of the lifespan.

5.2 Indicative Price Relative to Spot

Let S be the prevailing gold spot price per troy ounce. An indicative mid-market price for a DGO of remaining life fraction τ is:

$$P(\tau) = S \cdot U(\tau) \cdot (1 - f) + \beta(\tau)$$

where:

- f is the effective residual of mint-time fees already deducted (storage and transport), expressed as a fraction of S ;
- $\beta(\tau)$ is a residual premium or discount that captures market liquidity, compliance-envelope demand, and short-term supply/demand imbalances. β may be positive (price above the utility-adjusted spot) or negative (price below).

Consequently a new DGO ($\tau \approx 1$) trades closer to (or above) spot after fee adjustment, while an older DGO ($\tau \rightarrow 0$) trades at a progressive discount reflecting declining remaining utility. Exact values of α , f and the functional form of β are set by market practice and platform parameters and may be updated by notice.

5.3 Digital Redemption Pricing

When a holder registers DGOs for digital redemption, the redemption price may be locked at the prevailing rate at the moment of registration. Matching-emission techniques allow the platform to honour that locked price at a later settlement date after any temporary surge in redemption demand, provided the ordinary pool can do so within an adequate time. Holders who require earlier crypto/stablecoin settlement incur a material haircut relative to the locked price. This mechanism ensures that liquidity-pool depth



does not have to absorb instantaneous peak demand at the cost of price integrity for registered redemptions.

Digital cash-out is intentionally a steady-state process. It is not designed to function as a trading or arbitrage avenue. Where the ordinary liquidity pool cannot honour a registered redemption price within an adequate amount of time—whether because of concurrent demand that would exhaust capacity, operational constraints, or a material upward price spike that the holder seeks to capture on liquidation—the platform issues a Billet Note (BNOTE)³ for the corresponding weight rather than settling through the pool at a price that cannot be honored.

By billeting the claim, the holder retains the ability to realise value under the BNOTE regime. Ordinary DGO digital redemption via liquidity pools remains the default path when the registered price can be honoured in adequate time.



6. Issuance Mechanics

6.1 Production-to-Emission Cycle

DGOs are not issued at will. Issuance follows a controlled cycle:

- Mine production is handed over under dual-team custody (structurally separated mine representatives and 0xRWAME Oracle Representatives).
- Offtake partner receives and records the gold.
- Oracle validation covers production, delivery, price, compliance and, where applicable, composite valuation.
- Onshore 0xRWAME Treasury confirms physical receipt.
- Offshore 0xRWAME Global Treasury issues the approval gate.
- Onshore 0xRWAME Treasury mints DGOs on-chain, deducting the non-redeemable two-year storage fee and applicable transport fees at mint.
- Offshore 0xRWAME Global Treasury allocates the minted DGOs for distribution.

Minting occurs only after physical gold settlement has concluded. The architecture therefore does not permit over-mint relative to verified receipt. Any discrepancy that surfaces is an under-mint, detectable in audit; offtake data from source is published, limiting incidence.

6.2 Digital Redemption

Digital redemption is effected through on-chain liquidity pools. A holder may register DGOs for redemption at a locked price. Settlement occurs according to pool capacity and the matching-emission schedule when the registered price can be honoured within an adequate time. Early exit relative to the registered schedule is available subject to a significant haircut. On redemption the corresponding DGOs are burnt.

Where the pool cannot honour the registered price within an adequate time—including spike-capture liquidation attempts—the platform issues a BNOTE³ for the weight instead of settling through the ordinary pool.



7. Custody, Verification and Security Architecture

7.1 Design Posture

Security of the DGO is dual-domain: off-chain controls govern physical gold, custody and attestation; on-chain controls govern issuance, transfer, redemption and lifecycle. The two domains are coupled by oracle attestation and by a split of minting authority. The platform treats onshore operational partners as adversarial by design. Trust is not placed in any single onshore actor; it is placed in structural separation, multi-party sign-off, independent surveillance and the impossibility of minting without verified physical receipt.

7.2 Off-Chain Physical and Institutional Security

Off-chain security protects the hard physical floor—the requirement that every outstanding DGO is matched by a corresponding ounce-owing at an offtake partner.

- **Proprietary custodial security:** never third-party contracted. A platform-funded Custodial Security entity is established for each onshore jurisdiction.
- **Four-way shipment signatures:** Mine Shipment, Mine Security (witness only), Custodial Security and Offtake Partner must all sign every handover. No single party can complete a transfer unilaterally.
- **Field Intelligence Unit:** a non-intervening, surveillance-only unit reporting directly to the offshore Global entity, bypassing the onshore chain of command.
- **Parametric insurance:** written against the relevant corporate cell structure for logistics and related risks.
- **Split minting authority:** physical movement and onshore accounting remain onshore; the approval signal that permits mint travels from the offshore Global Treasury. Onshore parties cannot mint unilaterally.

Every mint event is tied to a documented, multi-party, oracle-validated physical receipt. The architecture does not permit over-mint relative to verified receipt. Any discrepancy that surfaces is an under-mint, detectable in audit.

7.3 On-Chain Protocol Security

On-chain security is conceptual and chain-agnostic. The DGO instrument imposes the following integrity properties regardless of the host execution environment eventually selected:

- **Burn-and-mint conservation:** DGOs are created only against verified ounces and destroyed on redemption, conversion to a terminal instrument, or lifecycle expiry. Outstanding digital supply cannot exceed attested physical owing.
- **No path back from terminal states:** BNOTE, DNOTE and DGPerp are terminal relative to the DGO. Conversion burns the DGO; the claim continues only under the successor instrument. This prevents double-claim across instrument layers.



- **Compliance-envelope restriction:** transfers are possible only among wallets inside the defined envelope. The envelope is a security boundary as well as a regulatory boundary: it limits the set of addresses that can hold or move DGOs and supports clawback when rules are breached.
- **Clawback as enforced control:** the protocol can reverse DGOs from wallets for non-compliance or under automated rules. Clawback is not an exception path; it is a designed control used for compliance enforcement and for transparent lifecycle re-issue.
- **Transparent lifecycle re-issue:** automated expiry, dispute and probate handling operate by clawback, conversion with charges applied, and re-issue to the holder's holding address together with a matching SNOTE. The path is auditable; it does not create undocumented residual claims.
- **Non-bridgeable by design:** DGOs cannot leave their host environment or enter open unrestricted DeFi. Composability outside the envelope is out of scope, reducing external smart-contract and bridge attack surface against the instrument itself.

7.4 Oracle and Attestation Security

Oracles couple the physical domain to the on-chain domain. Security properties at this boundary include:

- **Multi-oracle validation:** mint approval depends on more than one independent attestation covering production, delivery, compliance and related checks. Single-oracle compromise is insufficient to authorise issuance.
- **Dual-team custody at handover:** mine representatives and platform oracle representatives are structurally separated at physical handover, reducing collusion risk at the point where ounces enter the attestation path.
- **Provenance binding:** each DGO carries origin-tagged metadata (mine coordinates, offtake reference, treasury location, IPFS manifest hash). The on-chain instrument remains bound to a specific attested receipt, not to a fungible pooled claim.
- **Published under-mint detectability:** offtake data from source supports external and internal audit. Over-mint is architecturally excluded; under-mint is the residual discrepancy mode and is detectable.

7.5 Redemption and Stress-Path Integrity

Ordinary digital redemption uses locked-price registration and matching emission so that pool settlement need not absorb instantaneous peak demand at the cost of price integrity. Where a registered price cannot be honoured within an adequate time, the claim is routed to BNOTE rather than forced through the pool at a price that cannot be honored. This preserves the character of cash-out as a steady-state process and prevents the redemption facility from becoming an unbounded mark-to-market liability or a speculative channel. In all cases the DGO is burnt when the claim leaves the DGO state.

7.6 What Security Does Not Claim

Conceptual security of the DGO does not eliminate residual risk. In particular:

- **Key and bearer risk:** control of the private key is control of the claim within the envelope. Loss or compromise of keys is borne by the holder except where clawback rules expressly provide otherwise.
- **Oracle and collusion residual:** multi-oracle and dual-team design reduce but do not eliminate the possibility of coordinated false attestation.



- **Onshore institutional residual:** adversarial design assumes onshore parties may defect; structural controls and offshore approval gates mitigate, but physical gold remains subject to local law and force majeure.
- **Implementation residual:** this white paper does not select a host chain, virtual machine or cryptographic suite. Those choices belong to deployment and must be evaluated separately against the integrity properties defined here.

Builders must treat the above boundaries as the security interface of the instrument. Products that assume continuous unrestricted liquidity, absence of clawback, or perpetual DGO stock without terminal conversion are inconsistent with the protocol's security model.



8. Use Cases

The DGO is an emission vehicle. Its primary function is to represent verified delivered gold ounces in digital form for the duration of the 24-month lifespan and to enable digital exit into crypto or stablecoin. Because the instrument is open and production-backed, the set of legitimate uses is broader than a single financing programme:

- **Direct mine offtake:** a mine (or aggregator) sells verified output as DGOs into a global digital market without establishing its own international distribution footprint.
- **Digital representation of production-backed gold:** origin-tagged DGOs serve as the atomic unit for on-chain inventory, settlement and secondary transfer within the compliance envelope.
- **Digital redemption:** locked-price registration and matching emission provide a steady-state cash-out path into crypto or stablecoin.
- **Compliance-envelope settlement:** DGOs may be transferred among compliant wallets for settlement of obligations denominated in gold weight.
- **Secondary trading:** sanctioned venues may list DGOs for secondary trading among eligible participants.
- **Bridge to physical delivery:** holders who want physical metal convert DGOs into DNOTEs (terminal for the DGO).
- **Bridge to perpetual digital weight:** holders who want indefinite digital weight convert DGOs into DGPerps (terminal for the DGO).
- **Stress contingency:** under stress or registered prices that cannot be honored, claims route to BNOTE (terminal for the DGO).
- **Programme building block:** programmes may use DGOs as the emission layer against which notes, pools or structured products are constructed; the DGO itself remains independent of any single programme.



9. Scalability

9.1 Conceptual Bounds

The DGO is an open emission instrument. Its theoretical ceiling is the set of all verified troy ounces of 99.9% refined gold that can be recorded by a secure offtake partner and ledged by a treasury partner. Because the instrument is defined solely by the existence of those two counterparties and by on-chain burn-and-mint rules, any gold mine that can satisfy the dual-party attestation may in principle emit DGOs. There is therefore no platform-imposed numerical cap on aggregate issuance. The design applies equally to industrial-scale and artisanal production; it is not restricted to any particular mining segment.

9.2 Theoretical Issuance and Destruction Rates

Let P be annual formalisable mine output (tonnes or ounces) that can be brought under dual-party attestation. Let $\lambda \in (0,1]$ be the fraction of P that elects to emit DGOs in a given period. Theoretical maximum annual issuance is then $\lambda \cdot P$. Because every DGO is destroyed on digital redemption, conversion to a successor instrument, or expiry at the end of its 24-month lifespan, the long-run steady-state outstanding stock S satisfies:

$$S \approx \lambda \cdot P \cdot L$$

where $L = 2$ years is the nominal lifespan. Outstanding stock cannot exceed roughly two years of captured production. Destruction rate in steady state equals issuance rate; any temporary imbalance is absorbed by the finite lifespan.

9.3 Regime-Specific Behaviour

Three stylised regimes illustrate the instrument's behaviour:

9.3.1 Normal Steady State

Issuance tracks the flow of verified deliveries. Redemption demand is met by ordinary liquidity-pool settlement and matching emission. Outstanding stock remains a stable multiple of recent production. Creation and destruction rates are approximately equal.

9.3.2 Stress Event

Concurrent redemption demand exceeds ordinary pool capacity, or registered prices cannot be honoured within an adequate time (including spike-capture attempts). Affected claims are routed to BNOTE issuance. The DGO stock is reduced by the burnt weight; the claim continues only under the BNOTE. Creation of new DGOs may continue against fresh verified deliveries; the stress path does not freeze minting.

9.3.3 Production Glut

A sudden increase in formalisable output (new mines, higher capture of previously informal production, or rapid onboarding) raises $\lambda \cdot P$. Outstanding DGO stock can expand up to the two-year multiple of the



new higher flow. Secondary-market pricing of DGOs may soften if redemption demand does not rise commensurately, but the instrument itself imposes no artificial throttle. Builders of products that hold or intermediate DGOs must treat glut-driven expansion of stock as a first-order design consideration.

9.4 Conceptual and Technical Limitations for Builders

The DGO is intentionally minimal. Builders constructing products, marketplaces or financing structures around it must respect the following hard boundaries:

- **Finite lifespan.** Every DGO expires after 24 months. Products that assume perpetual digital gold must route through DGPerp conversion; they cannot rely on rolling DGO stock indefinitely.
- **Weight-only at the physical layer.** The DGO represents a claim on a stated weight, not a claim on a fixed monetary value. Price discovery is external.
- **Dual-party dependency.** Issuance requires both a secure offtake partner (haul recording) and a treasury partner (ledger of deposits and withdrawals). Absence or failure of either party halts new minting for the affected ounces.
- **Compliance-envelope restriction.** Transfers and trading are confined to the defined envelope. Open DeFi composability and cross-chain bridging are out of scope.
- **Non-linear utility.** Market value declines with remaining life. Any secondary market or collateral model must incorporate age-dependent pricing or accept basis risk.
- **Stress routing.** When the ordinary pool cannot honour a registered price, claims leave the DGO state and become BNOTEs. Products that assume continuous pool liquidity must accommodate this discontinuity.
- **Clawback.** The platform may reverse DGOs from wallets for non-compliance or under automated rules. Products that treat DGO balances as final must design for reversal risk.
- **No over-mint.** The architecture forbids issuance beyond verified physical receipt. Any apparent surplus is an under-mint detectable in audit.

These limitations are definitional, not commercial policy. They constitute the interface that any surrounding product must implement against.



10. Conclusion

The Delivered Gold Ounce is a production-backed, burn-and-mint emission vehicle with onshore primary custody, a fixed 24-month lifespan, origin tagging, and digital-only redemption. Mint-time deduction of a non-redeemable two-year storage fee, free transfers, clawback exposure, and non-linear pricing that reflects declining remaining utility are integral design features.

Scalability is bounded only by formalisable production that can be dual-party attested; the instrument itself imposes no numerical issuance ceiling. The lifecycle is mint, use, burn: every exit path destroys the DGO, and successor instruments are terminal states of the DGO claim.

This document defines the enduring fundamentals of the DGO as an open emission tool usable by any gold mine that satisfies dual-party attestation. Product and programme structures that utilise the DGO are documented separately and may evolve independently of the unit of account itself.



11. Glossary

Burn-and-mint. Issuance model in which DGOs are created only against verified physical ounces and destroyed on digital redemption, conversion or expiry, preventing liability rollover.

Clawback. Platform-initiated reversal of a DGO from a wallet, typically for non-compliance or automated rules; usually charged.

Compliance envelope. The set of wallets and transfer channels within which DGOs may be freely moved; transfers outside the envelope are prohibited.

DGO Lifespan. Fixed validity period of 24 months measured from the mint date of each DGO.

Digital redemption. Conversion of DGOs into crypto or stablecoin via on-chain liquidity pools. The sole ordinary redemption path for the DGO instrument itself.

Dual-team custody. Handover protocol requiring structurally separated mine representatives and 0xRWAME Oracle Representatives.

Emission vehicle. Role of the DGO as the digital instrument issued against verified delivered gold; independent of any particular financing product.

Four-way signature. Mandatory multi-party sign-off on every shipment: Mine Shipment, Mine Security (witness), Custodial Security, and Offtake Partner.

Hard physical floor. Requirement that every outstanding DGO is matched by a corresponding ounce-owing recorded at the offtake partner.

Matching emission. Technique that allows a locked redemption price to be honoured at a later settlement date after a surge in demand.

Offshore. Activities and entities of the Global Treasury and related global functions, as distinct from onshore operations.

Offtake partner. Entity that receives and officially records mine production; the point at which 0xRWAME gold-ounce owings are established.

Onshore. Activities and entities located in the jurisdiction of production, including the onshore Treasury and custodial arrangements.

Oracle attestation. On-chain proof of delivery and related validation data produced by the multi-oracle apparatus.

Origin tagging. Provenance metadata attached to each DGO (mine coordinates, offtake reference, Treasury location, IPFS manifest hash, etc.).

Terminal state. An instrument reached by burning a DGO (BNOTE, DNOTE or DGPerp). There is no path from a terminal state back to a DGO.

Troy ounce. Unit of weight for precious metals (approximately 31.1035 grams); the physical unit against which one DGO is defined.

Utility decay. Decline in remaining economic usefulness of a DGO as it approaches Lifespan expiry, reflected in non-linear pricing.



Addendum — Material Risks

The following risks are material. They are presented for reference.

Custody and counterparty. Dependence on integrity of offtake partners, onshore Treasury staff and dual-team custody apparatus. Defection, collusion or regulatory action against onshore stocks can impair backing.

Verification and oracle. Oracle feeds remain points of potential failure or manipulation. Multi-oracle design and dual-team separation mitigate but do not eliminate the risk.

Liquidity and digital redemption. On-chain pool depth may be insufficient for simultaneous large redemptions. Locked-price registration and matching emission mitigate price impact for registered holders; early exit carries a haircut. Prices that cannot be honored route to the BNOTE instrument³.

Lifespan and utility decay. Market value declines with remaining life. Holders of older DGOs realise a lower price relative to newly minted instruments representing the same gold quantity.

Clawback. DGOs may be reversed from wallets for non-compliance or under automated rules. Products and holders that treat balances as final are exposed to reversal risk.

Technology and key management. Smart-contract defects, key-management failures or continuous trading mismatches with physical markets can produce transfer or valuation failures. Bearer possession places irreversible loss risk on the holder.

Dispute / probate transition. DGOs entering dispute or probate regimes are handled under the same automated lapse rules as natural expiry unless otherwise ordered by the relevant authority: sufficient funds yield DGPerps²; insufficient funds yield stablecoins at spot, delivered to the holding address via clawback and re-issue with matching SNOTE⁴.

Compliance envelope. Transfer restrictions and the prohibition on open DeFi and external bridging limit secondary-market venues and may constrain exit options relative to unrestricted instruments.



Footnotes

1. Delivery Note (DNOTE) White Paper, 0xRWA Platform.
2. Digital Gold Perpetual (DGPerp) White Paper, 0xRWA Platform.
3. Billet Note (BNOTE) White Paper, 0xRWA Platform.
4. Settlement Note (SNOTE) White Paper, 0xRWA Platform.



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