

◆ REAL WORLD ASSET TOKEN ◆

IDDF-MSCI

MSCI ID Digital Funds

Tokenized Access to Indonesia's Premier Gold & Equity Rotation Fund

**Underlying Asset: MSCI ID Digital Funds,
STAR Asset Management**

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1. Project at a Glance

Token Name / Ticker	MSCI ID Digital Funds Token / IDDF-MSCI
Token Standard	Base Chain
Underlying Asset	MSCI ID Digital Funds, Discretionary Mandate managed by STAR Asset Management
Asset Strategy	Equity-Gold Rotation: Dynamic allocation between MSCI World Islamic Top 50 Index and iShares Gold Trust (IAU)
Token Pricing	Derived from the end-of-day NAV per Unit of the underlying Discretionary Mandate (KPD)
Project Owner	PT. Sejahtera Bersama Nano, registered in Indonesia
Token Issuer	PT. Sejahtera Bersama Nano
Asset Manager	STAR Asset Management: AUM > Rp 30 Trillion, 8M+ SID
Underlying	1 token = 1 unit of fund product consisting of multiple assets managed by asset managers

2. Introduction

IDDF-MSCI is a Real World Asset (RWA) token designed to provide seamless, blockchain-based access to Indonesia's premier Gold-Equity rotation fund, the MSCI ID Digital Funds, managed by STAR Asset Management. Each IDDF-MSCI token represents a fractional economic interest in a Discretionary Mandate (Kontrak Pengelolaan Dana / KPD) that dynamically rotates between global equities and physical gold based on quantitative trend signals.

STAR Asset Management is one of Indonesia's leading investment managers, with Assets Under Management exceeding Rp 30 trillion and more than 8 million Single Investor Identification (SID) registrations, the largest in the Indonesian market. STAR AM holds dominant positioning in Fixed Income Mutual Funds, ranking #13 in the industry, and is certified under global governance standards including ISO 9001, 27001, 27701, and 37001.

IDDF-MSCI bridges the gap between traditional capital markets (TradFi) and the digital asset ecosystem, enabling retail and tech-savvy investors to access a sophisticated, professionally managed allocation strategy through a familiar crypto exchange interface.

3. Market Background

3.1 The Challenge of Tactical Asset Allocation for Retail Investors

Sophisticated investment strategies, such as dynamic rotation between defensive and growth assets, have historically been the preserve of institutional investors and high-net-worth individuals. Retail investors in Indonesia typically access only straightforward mutual fund products, with limited ability to benefit from tactical, data-driven portfolio management.

At the same time, Indonesian retail participation in the capital markets is growing rapidly. The crypto asset market in Indonesia recorded cumulative transactions of IDR 490 Trillion in 2025, demonstrating strong demand for digital financial products that align with the digital habits of modern investors.

3.2 Why Gold and Equity Rotation?

Gold and equities represent two of the most important asset classes for long-term wealth creation. Critically, these two assets exhibit near-zero long-term correlation, making their combination a powerful portfolio diversification tool:

- Over 25 years, the correlation between gold and US equities has been close to zero, providing natural hedging benefits.

- While gold has experienced negative 1-year rolling returns approximately 30% of the time, simultaneous drawdowns in both gold AND US equities have occurred in only ~7% of instances over the same period.
- Historically, a dynamic Gold-Equity rotation strategy has been approximately equally invested in both asset classes, with each contributing a similar share of total performance.

The MSCI ID Digital Funds exploits this relationship through a rules-based, quantitative trend-following approach that seeks to be invested in whichever asset is exhibiting the strongest positive momentum, while protecting capital during periods of market stress.

4. Solution: The IDDF-MSCI Token

IDDF-MSCI introduces a blockchain-based approach to accessing professional asset management by tokenizing the MSCI ID Digital Funds Discretionary Mandate. Token holders gain economic exposure to the fund's performance without the need to open a traditional brokerage or investment management account.

Key benefits of the IDDF-MSCI structure:

- Fractional access: Invest in a professionally managed fund from small ticket sizes.
- Digital distribution: Buy and sell via licensed crypto exchanges, available 24/7 for transfers on Base Chain.
- Transparent NAV pricing: Token pricing is always anchored to the daily NAV per Unit of the underlying KPD.
- Non-peer-to-peer integrity: Users transact only with the Token Issuer, ensuring price integrity and regulatory compliance.
- Professional management: Backed by STAR AM's institutional-grade investment process with risk-controlled volatility targeting.

5. Underlying Fund: MSCI ID Digital Funds

5.1 Strategy Overview

The MSCI ID Digital Funds is a Discretionary Mandate (KPD) managed by STAR Asset Management. The fund employs a quantitative equity-gold rotation strategy designed to tactically enhance a long gold position with a long equity position by continuously evaluating market trends.

The strategy uses the following allocation universe:

Component	Instrument
Equity Trend Signal	US Equities
Equity Allocation	MSCI World Islamic Top 50 Index
Gold Trend Signal	MSCI Gold Futures Index
Gold Allocation	iShares Gold Trust (IAU)

5.2 Allocation Rules

The strategy uses reliable short-term trend signals to determine the active allocation at any given time:

- Case 1, Both assets exhibit positive trends: Allocate 100% to the asset with the stronger trend signal.
- Case 2, Only one asset exhibits a positive trend: Allocate 100% to that asset.
- Case 3, No positive trends detected (random or bearish markets): Allocate 100% to the asset with the lower realized volatility.

Risk is further controlled by calibrating each asset allocation to maintain a 10% annualized volatility target, providing investors with a consistent risk-adjusted experience.

5.3 Historical Performance

Based on 25-year simulations (March 2001 – April 2026, net total returns in USD):

Metric	World Islamic Top 50	iShares Gold Trust	Gold & Equity Rotation
Annualized Return	6.2%	8.3%	11.2%
Annualized Risk (Volatility)	9.8%	10.0%	10.1%
Return / Risk Ratio	0.63	0.83	1.11

The Gold & Equity Rotation Index has delivered an annualized return of 11.2% with a return/risk ratio of 1.11, superior to both underlying components individually, demonstrating the power of tactical rotation over a full market cycle.

Note: Simulations are indicative illustrations only. Historical performance is not indicative of future results. Simulations have not been adopted or endorsed by MSCI.

6. Tokenization Structure

6.1 Structural Overview

IDDF-MSCI follows a tokenization structure involving three key parties: the Token Issuer (PT. Sejahtera Bersama Nano), STAR AM as the investment manager, and licensed Crypto Exchange distribution partners.

The end-to-end flow is as follows:

1. Token Issuer (PT. Sejahtera Bersama Nano) invests capital via a Discretionary Mandate (KPD) into the MSCI ID Digital Funds.
2. STAR AM manages the RWA investment (equity-gold rotation) within the KPD and calculates the daily NAV per Unit.
3. PT. Sejahtera Bersama Nano issues IDDF-MSCI tokens that replicate the fund's performance. Token pricing is derived from the end-of-day NAV per Unit of the KPD.
4. IDDF-MSCI tokens are distributed via licensed Crypto Exchanges. PT. Sejahtera Bersama Nano determines the minimum purchase requirement.
5. Users purchase and redeem tokens through Crypto Exchanges. All transactions occur between the user and PT. Sejahtera Bersama Nano (non-peer-to-peer). Transaction prices are based on the end-of-day NAV per Unit.

6.2 NAV-Based Pricing

Token pricing is always anchored to the NAV per Unit of the underlying Discretionary Mandate, as calculated daily by STAR AM. This ensures that IDDF-MSCI tokens always reflect the true economic value of the underlying MSCI ID Digital Funds portfolio, with no speculative premium or discount driven by secondary market dynamics.

6.3 Mint & Redemption Procedure

Subscription (Minting):

- User submits a subscription order via the licensed Crypto Exchange or PT. Sejahtera Bersama Nano portal (fiat or stablecoin).
- PT. Sejahtera Bersama Nano channels capital into the KPD via STAR AM at the next available NAV calculation date.
- NAV confirmation triggers a mint instruction.
- IDDF-MSCI tokens are issued and delivered to the user's wallet.

Redemption (Burning):

- User submits a redemption request via the licensed Crypto Exchange.
- PT. Sejahtera Bersama Nano processes redemption from the KPD at the next end-of-day NAV.

- IDDF-MSCI tokens are burned on Base Chain upon settlement confirmation.
- Proceeds are returned to the user in fiat or stablecoin.

7. Tokenomics

7.1 Token Specifications

Token Name	MSCI ID Digital Funds Token (IDDF-MSCI)
Token Type	Asset-referenced utility token (RWA-backed)
Blockchain	Base chain
Underlying	1 token = 1 unit of fund product consisting of multiple assets managed by asset managers
Issuance Model	Mint-on-demand against KPD units; burn on redemption
Supply Cap	Not capped; circulating supply is always equal to units held in the KPD (1:1 parity)
Transaction Type	Non-peer-to-peer; all trades are between user and PT. Sejahtera Bersama Nano (Token Issuer)
Pricing Mechanism	End-of-day NAV per Unit of the MSCI ID Digital Funds KPD
Minimum Purchase	Determined by Token Issuer (PT. Sejahtera Bersama Nano); subject to change
Decimals	8

7.2 Supply Discipline

IDDF-MSCI supply is strictly match-funded to the underlying KPD investment:

- IDDF-MSCI tokens are minted only when new capital is invested into the KPD through PT. Sejahtera Bersama Nano.
- IDDF-MSCI tokens are burned when capital is redeemed from the KPD.
- Every mint/burn event is recorded on Base chain.
- There are no founder allocations, private sale allocations, or pre-minted reserves, supply grows only as new investment enters the fund.

8. Fee Structure

IDDF-MSCI holders are subject to the following fees within the underlying fund structure:

Fee Type	Minimum	Maximum
Asset Management Fee (STAR AM)	100 bps	150 bps
Custodian Bank Fee	10 bps	25 bps
Token Exchange / Distribution Fee	<i>To be disclosed</i>	<i>To be disclosed</i>

All fees are reflected in the NAV per Unit calculation and are therefore already embedded in the IDDF-MSCI token price. There are no additional subscription or redemption fees charged at the token level beyond what is disclosed by the Crypto Exchange platform.

9. Risk Considerations

Investing in IDDF-MSCI involves material risks. Prospective holders should carefully read the following and seek independent professional advice where appropriate.

- **Market Risk:** The value of the MSCI ID Digital Funds is driven by performance of equities and gold. Both asset classes can experience significant drawdowns due to macroeconomic conditions, interest rates, geopolitical events, or company-specific factors. IDDF-MSCI is not a capital-protected product.
- **Strategy Risk:** The rotation algorithm is rules-based and quantitative; it may not always correctly identify trend signals, particularly in sudden market reversals or structurally unusual market conditions.
- **Foreign Exchange Risk:** The underlying instruments are denominated in USD. Holders transacting in IDR bear FX translation risk.
- **Counterparty Risk:** The KPD and its underlying assets are managed by STAR AM. Failure of the asset manager or token issuer could impair redemption.
- **Smart Contract Risk:** Although IDDF-MSCI uses OpenZeppelin standard libraries, smart contracts may contain undiscovered vulnerabilities.
- **Regulatory Risk:** Regulatory treatment of tokenized securities and RWA tokens is evolving in Indonesia and globally. Future rule changes may affect the availability, transferability, or tax treatment of IDDF-MSCI.
- **NAV Tracking Deviation:** Short-term deviations between IDDF-MSCI token price and underlying NAV per Unit may occur due to settlement cycles, calculation timing, and operational factors.
- **Liquidity Risk:** Redemption is subject to the KPD's liquidity terms. Large redemptions may be subject to reasonable queuing or processing delays.
- **Operational / Cyber Risk:** Bridge exploits, private key compromise, exchange outages, or other cyber incidents could disrupt service.

10. Compliance and Governance

10.1 KYC / AML

Primary market access (subscription and redemption) is subject to full KYC conducted by PT. Sejahtera Bersama Nano and/or licensed exchange partners, including identity verification, sanctions screening, and risk scoring. The issuer does not permit primary market access from FATF high-risk jurisdictions or US persons unless specifically exempted.

10.2 Governance Structure

- **Token Issuer:** PT. Sejahtera Bersama Nano is responsible for product strategy, technology delivery, token issuance/redemption, and commercial operations.
- **Investment Manager:** STAR Asset Management is responsible for management of the MSCI ID Digital Funds KPD, including investment decisions, risk management, and reporting.
- **Multi-Sig Governance:** Mint/burn operations are governed by a multi-signature wallet arrangement to prevent unilateral supply changes.

11. Roadmap

Phase	Timeline	Key Milestones
Phase 1, Index Development	1 Month	Design and finalize the Equity-Gold Rotation quantitative strategy and index methodology.
Phase 2, Regulatory Approval	3 Months	Legal structuring of the KPD as the underlying asset. Obtain OJK regulatory approvals for tokenized product.
Phase 3, Book Building	1 Month	Investor education, marketing campaign, and pre-subscription from anchor investors.
Phase 4, Launch	Q3 2026	Integration with licensed Crypto Exchanges. Live token issuance. Target AUM: IDR 200 Billion.
Phase 5, Omnichain Expansion	H1 2027	Ethereum and additional chain deployments via LayerZero OFT.

12. Economic Benefit and Strategic Impact

12.1 Financial Inclusion

IDDF-MSCI democratizes access to institutional-grade asset management. By enabling fractional investment via crypto exchanges, the product opens STAR AM's sophisticated Gold-Equity rotation strategy to millions of Indonesian retail investors who previously lacked access to discretionary mandate products.

12.2 Market Differentiation for STAR AM

STAR AM's existing product portfolio is concentrated in fixed income mutual funds. IDDF-MSCI serves as a differentiated product offering, targeting the rapidly growing tech-savvy retail segment and capturing demand from crypto-native investors seeking regulated, asset-backed products. It directly supports STAR AM's 2026 strategic objective of strengthening brand awareness and diversifying its product mix.

12.3 Bridging TradFi and DeFi

IDDF-MSCI is a reference implementation for a professionally managed, regulated RWA token issued in Indonesia. By demonstrating a compliant structure that integrates KPD asset management and crypto exchange distribution, IDDF-MSCI contributes to OJK's broader objective of developing an orderly tokenized securities ecosystem in Indonesia.

12.4 Domestic Economic Footprint

Because IDDF-MSCI is issued and operated by Indonesian entities (PT. Sejahtera Bersama Nano and STAR AM), income, employment, VAT, and transactional taxes arising from the project accrue domestically, contributing to Indonesia's digital economy.

13. Disclaimer

This whitepaper is published for informational purposes only and does not constitute an offer to sell, a solicitation to buy, or a recommendation of any security or financial instrument.

IDDF-MSCI is made available only where lawful and only to persons who meet the applicable eligibility criteria. Nothing in this document should be construed as legal, tax, accounting, or investment advice.

Past performance of the MSCI ID Digital Funds strategy, its simulated index, or any underlying instruments is not indicative of future results. Simulation results are indicative illustrations only; simulations have not been adopted or endorsed by MSCI.

Statements about future plans (including roadmap items, AUM targets, and regulatory alignment) are forward-looking and subject to change without notice. Readers should consult qualified advisors before making any investment decision.

14. About STAR Asset Management

Company	STAR Asset Management
AUM	Exceeding Rp 30 Trillion
Investors (SID)	More than 8 Million, Largest in the Indonesian Market
Industry Ranking	#13 in the Indonesian Asset Management Industry
Governance Standards	ISO 9001, 27001, 27701, 37001
Specialty	Fixed Income Mutual Funds; expanding into digital asset-linked products
Strategic Vision 2026	Level Up #ToTheStar, Capturing digital investors, tech-savvy retail, and new distribution channels

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