White Paper: Challenges in Domestic Futures Post-Trade Operations and the Path to Automation

~Breaking Away from "Galapagos Syndrome" and the Roadmap to Global Standards~

Executive Summary

This white paper serves as a proposal to streamline post-trade operations and strengthen international competitiveness in the domestic (Japanese) futures market.

Currently, the domestic market is diverging from global standards (becoming "Galapagosized") due to unique business practices such as "reconciliation discrepancies of 1 JPY" and "excessive double reconciliation." Particularly, considering that the Trade Matching function for futures transactions is not implemented in JASDEC's (Japan Securities Depository Center) PSMS (Pre-Settlement Matching System), waiting solely for system renewal is not enough. It is an urgent task to resolve these issues proactively through the "standardization of operational practices (formulation of industry guidelines)."

This paper presents a roadmap (Phase 1–3) for "rule unification" and "automation" led by the industry, outlining a path toward "overall optimization" that all market participants can enjoy.

1. Current Status of Domestic Futures Post-Trade Operations vs. Global Standards

Japanese post-trade operations, in their pursuit of accuracy, have been left behind by the global trends of "speed" and "standardization." This divergence is summarized in the following three points.

1.1. The Gap with the Global Benchmark "30-30-30"

The FIA (Futures Industry Association) DMIST (Derivatives Market Institute for Standards) advocates the "30-30-30 Rule" for expediting post-trade processing, which is becoming the new global standard.

Item	Global Standard (Recommended by DMIST)	Current Status in Japan	Issues
Give-up	Within **30 mins** after trade	After market close (After 17:00)	Delays due to batch processing dependence
Allocation	Within **30 mins** after Give-up	Cases continuing until the next morning exist	Time lag in risk management
Take-up	Within **30 mins** after Allocation	T+1 processing is the norm	Delay in settlement finalization

In Japan, evening batch processing and manual reconciliation act as bottlenecks, and the reality is that the market falls significantly below this standard.

1.2. The "1-Yen Issue" Caused by Non-Unified Average Price Calculations

The mixture of the domestic unique "Amount Method" and the global standard "Unit Price Method" is not merely a calculation error but a symbol of structural inefficiency. The mechanism of discrepancy generation when settling a position of 450 contracts in two separate transactions is shown below[1].

[Chart: Mechanism of "1-Yen Discrepancy" Generation by Calculation Method (Example)]

Transaction Scenario	Nikkei 225 Futures: Sell 450 contracts (Average Price @27,000 JPY) settled in 2 tranches

Calculation Method	A. Amount Method
	Domestic Mainstream (Compliant with JSCC)
Logic	Fix the total amount and adjust the fraction in the final transaction.
1st Settlement	(225 contracts) Retain the calculated fraction.
2nd Settlement	(225 contracts) Add the fraction from the 1st time and adjust.
Final P&L	**-55,499,985 JPY**
Result	Matches the initial total amount perfectly.

Just to resolve this "1-yen discrepancy," confirmation work via phone and email occurs frequently between securities companies and trust banks, becoming the main cause forcing T+1 processing.

1.3. Complicated FIFO and "Japan Customization"

FIFO (First-In, First-Out) logic customized for each client also bloats system support costs.

Logic Type	Content	Adoption Status	System Load
Standard FIFO	Trade Date Order / Price Order (Real FIFO)	Global Standard	**Low** (Package support available)
Japan Custom	Night Session Priority, Max Gain, Specified Quantity Priority, etc.	Domestic Unique	**High** (Individual development required)

Interviews with major brokers revealed that **all companies can immediately support "Real FIFO (No intraday priority / Oldest trade date order)"**[2]. The complexity stems not from technical limitations but from a lack of consensus formation toward standardization.

2. Root Cause of Issues: Structural "Negative Spiral"

2.1. Habitual "Double Reconciliation" (Not Mandatory)

Currently, due to JASDEC (Hofuri) system specifications, futures transactions are outside the scope of Trade Matching functions unlike equities[3]. To compensate for this, the following flow has become customary in operational fields:

1. **Broker Internal Reconciliation:** Trade confirmation within their own system.
2. **Trust Bank Coordination/Reconciliation:** Receiving data from brokers and matching it with investment instructions (*This is where 1-yen discrepancies are detected*).
3. **Margin Reconciliation:** Matching unique margin calculation results (*This is not done overseas*).

This "double and triple checking just in case" fragments processes that should inherently be automated and bloats operational hours. It is not regulatory obligation but "custom" that is the bottleneck.

2.2. Remnants of Legacy Practice: "New/Close Distinction"

The commercial practice of specifying "New (Open)" or "Settlement (Close)" at the time of order placement is a remnant from the pre-electronic trading era. In JSCC clearing practice, "Close-out Reporting" alone is sufficient, but requirements for entry on order tickets act as shackles, remaining as mandatory fields in system linkage (API)[4]. This inhibits flexible FIFO processing and induces operational errors at the time of order placement.

3. Roadmap to Solution: Transformation via 3 Phases

To solve these issues, instead of waiting for specific system modifications, a phased approach starting with the unification of operational rules through the cooperation of all participants is optimal.

Phase 1: Foundation - Formulation of Industry Guidelines (~2026)
Streamline operations using existing infrastructure through "Rule Unification" that does not entail large-scale investment.

- **Average Price Calculation Guidelines:** Define standard calculation procedures for domestic practice (Amount Method) (clarifying rounding timing) while listing them alongside the global standard (Unit Price Method) for future migration.
- **Standardization of FIFO Logic:** Define "Trade Date Order / Price Order" as the industry standard and limit allowable options to 2–3 patterns.
- **Neutralization of "New/Close" Flags:** Build a framework that makes case-by-case flag designation unnecessary through **Advance Agreement at Account Opening** with customers (utilizing the exclusion provision of OSE Brokerage Agreement Standards Article 9)[5].

Phase 2: Penetration and Establishment - Establishing New Commercial Practices (~2027)
Establish the formulated guidelines as the "New Normal" for the entire industry.

- **Consensus Building:** Seek broad consensus with related organizations such as The Investment Trusts Association and the Trust Companies Association through public comments on draft guidelines.
- **Development of Standard Agreements:** FIA Japan, etc., to provide standard agreement templates for comprehensive agreement on FIFO logic, etc., between customers and brokers.
- **Elimination of Double Reconciliation:** Based on improved data reliability due to rule unification, guide the unique reconciliation processes between securities companies and trust banks toward simplification and elimination under mutual agreement.

Phase 3: Structural Reform - Building Future Infrastructure (~2028 and beyond)
Implement permanent responses for infrastructure and systems based on standardized operational processes.

- **Introduction of Electronic Matching:** Utilize global solutions such as FIX Protocol, Broadridge, and Osttra to realize fully automated (STP) processing at T+0[6].

- **Review of Regulatory Requirements:** Leveraging the track record of operational establishment, lobby the FSA (Financial Services Agency) for the formal deletion or review of entry requirements (New/Close distinction) on order tickets.

Conclusion: Industry Commitment Toward the "North Star"

The "North Star" we aim for is clear. It is a market where **"Standardized," "Automated,"** and **"Globally Aligned"** are realized.

This transformation is not to benefit specific participants but to achieve cost reduction and risk mitigation for the entire industry. Securities companies, asset management companies, trust banks, infrastructure providers, and regulators must understand each other's operational constraints and steer away from "excessive reconciliation" toward "trust-based automation."

We recommend that the industry unite and commence concrete actions to make the long-standing issue of "1-yen discrepancy" a thing of the past and evolve the Japanese futures market into a market of choice for the world.