

UAT Thought Document

..... Next Step Forward

The UAT System:
**“A Higher Standard of Fiduciary Oversight
For Money Managers in the
Externally Managed And Sub-Advised Industry”**



Harness The Power™

UAT, Inc.

www.uatinc.com

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Executive Summary

A widespread consensus has emerged, following the recent Financial Crisis, that the entire financial services industry must improve upon existing practices for fiduciary oversight. The \$3.5 TR externally managed and sub-advised industry is no exception.

Given this clear need, the patented UAT System* provides an integrated solution that provides Plans, Trusts and Fund in the externally managed and sub-advised investment platforms with a higher standard of fiduciary oversight – providing long-desired levels of real-time transparency, real-time supervision and significant cost savings. Given these new capabilities, this powerful technology enables Plans, Trust and Funds and their external money managers to collaborate and comprehensively address emerging threats and longstanding deficiencies that, until now, were considered intractable.

With the UAT System, the entire industry moves forward with greater transparency, improved supervision, increased efficiency, and lower costs. As a result of these improvements, money managers in particular realize a number of attractive benefits in their externally managed and sub-advised practices, including reduced pressure for fee cuts, less pressure to shift assets from active to passive management, greater focus on larger orders by trading personnel and enhanced oversight and supervision over the trading process.

Overall, the UAT System provides the *next step forward* for growth of the externally managed and sub-advised asset management market, pushing all participants closer to a more prosperous future across the globe. In the end, the adoption of this higher standard of fiduciary oversight, in addition to benefitting all market participants, is the right thing to do.

***The UAT System
represents a higher
standard of fiduciary
oversight for the
externally managed
and sub-advised
investment industry.***

“Those who ignore the past are condemned to repeat it.”

George Santayana

* United States Patent Number 7,685,057

The Marketplace

For decades, public and private defined benefit plans, defined contribution plans, mutual funds, not-for-profit funds, variable insurance products, bank trust groups, endowments, foundations and trusts have hired external money managers to manage some or all of their investment portfolios. The use of external money managers has enabled these financial organizations to create “best of breed” multi-manager investment platforms that benefit from the expertise of the finest money management firms in the industry.

As a result of these benefits, the externally managed and sub-advised industry has grown to \$3.5 trillion in assets. The benefits of an external or sub-advised practice to a money manager include:

- **Low Scale Requirements** – Providing asset management services to external organizations is a attractive business opportunity due to the low barrier to entry, low scale requirements for profitability, and ample opportunities to leverage success (a successful external or sub-advised mandate often leads to that organization hiring the money manager for additional mandates).
- **Brand and Product Extension** – External accounts carry the name of the money manager and, for some mutual funds, the name of the money manager’s similarly managed retail fund.
- **Low Overhead Support Requirements** – Money managers for external or sub-advised accounts do not incur expenses for wholesaling, marketing, advertising, customer service, call centers, print and mail processes, monthly statements, tax reporting or prospectus delivery.
- **Valuable Leverage of Portfolio Manager Resources** – A portfolio manager responsible for a successful retail mutual fund may manage dozens of external or sub-advised portfolios that closely mirror the successful retail mutual fund. These so-called “child” portfolios usually have over 90% of their positions overlapping with the “parent” mutual fund. In many cases, the total external and sub-advised assets (or even individual accounts) are actually larger in assets than the “parent” retail mutual fund or portfolio. These “child” portfolios utilize a small fraction of the investment management, research, marketing and sales resources compared with a money manager starting a portfolio with a new investment objective. The result is that externally managed and sub-advised portfolios provide valuable leveraging of the expertise of a portfolio manager to generate significant additional revenues.
- **Low Marketing and Sales Costs** – The sub-advised business requires relatively low expenditures in marketing materials, sales promotions and relationship management teams.

Altogether, a money manager’s external or sub-advised asset management practice is often its most profitable business segment.

Behind The Curve

In contrast to the attractive benefits that external and sub-advised accounts provide to money managers, the Plans, Trusts and Funds operating externally managed and sub-advised investment platforms face significant challenges in several important areas. Most importantly, these Plans, Trusts and Funds are encumbered by decades-old deficiencies with respect to lack of effective controls over their externally managed and sub-advised platforms. These shortcomings result in *three significant issues*:

- **Inadequate Transparency** – Current technology does not provide real-time reporting to address critical events, needs and issues. The financial crisis, however, has dramatically demonstrated the need for real-time transparency across an entire investment platform, the external money managers, the accounts or funds and their underlying holdings and activity.
- **Inadequate Oversight** — Current technology does not provide real-time supervision over the trading activity of external money managers. Yet there is clearly a fiduciary and/or regulatory obligation to implement systems, policies, and procedures to properly supervise trading activity and prevent violations by external money managers.
- **Unnecessarily High Brokerage Costs** — Current technology does not provide proper control over trading costs incurred by external money managers. These brokerage costs: often add an additional 10 to 15 basis points in expenses on top of disclosed asset management and operating expenses; are several times higher than necessary; and can result in tens of millions of dollars annually in unnecessary costs for larger externally managed or sub-advised platforms.

Plans, Trusts and Funds are encumbered by decades-old deficiencies with respect to lack of effective controls over their externally managed and sub-advised platforms.

Financial Research Corporation (FRC) reports that 88% of sponsors of externally managed and sub-advised platforms expect more growth in compliance concerns as this area becomes increasingly difficult to manage. In addition, the technology has never existed to properly manage many important operational processes. The lack of centralized control and real-time data creates inefficiencies and additional costs related to governance reporting, manager replacement, model portfolio rebalancing, social exclusions, target date funds, securities lending, risk management hedging programs and asset segregation reporting.

All in, there is clearly a need for a comprehensive solution that addresses newly emerging standards of fiduciary oversight. Such a solution, accomplished only through a spirit of collaboration between Plans, Trusts and Funds and their external money managers, will provide a solid foundation for the continued health and growth of the industry.

A New Standard of Fiduciary Oversight

UAT, Inc. (UAT) is a Denver, Colorado financial services technology company whose patented flagship product, the **UAT System** (United States Patent Number 7,685,057) provides innovative, reliable and real-time technology that provides a higher standard of fiduciary oversight to the externally managed and sub-advised market.

The UAT System is comprised of proven, award-winning compliance, reporting, and order management technology that provides Plans, Trusts and Funds with:

- **Real-Time Transparency** on holdings, orders, violations, and brokerage costs across accounts, account groups, managers, models, model programs, and the Plan, Trust or Fund.
- **Real-Time Oversight** through a centralized, real-time pre- and post-trade compliance platform. The UAT System identifies and prevents transactions by external money managers that are prohibited, violate regulatory rules, or violate account restrictions.
- **Real-Time Control Over Brokerage** that creates 5 to 8 bps in savings, resulting in improved investment returns, new operating revenues and new expense offsets.
- **Improved Efficiency and Lower Costs** in business processes, including governance reporting, manager replacement, model portfolio rebalancing, social exclusions, target date fund allocations, securities lending, asset segregation reporting, and risk management hedging programs for sub-advised assets.

The UAT System provides innovative and reliable technology that represents a powerful real-time solution to the externally managed and sub-advised industry's existing challenges.

How Does The UAT System Work?

The patented, ultra low latency UAT System provides Plans, Trusts and Funds with a standard order management, compliance, reporting, and broker connectivity system (as a hosted ASP solution). ***Most importantly, the UAT System easily integrates with a money manager's currently utilized trading and compliance system to provide maximum efficiency and reliability. Thus, the UAT System operates without requiring a money manager to operate an additional trading and compliance system.***

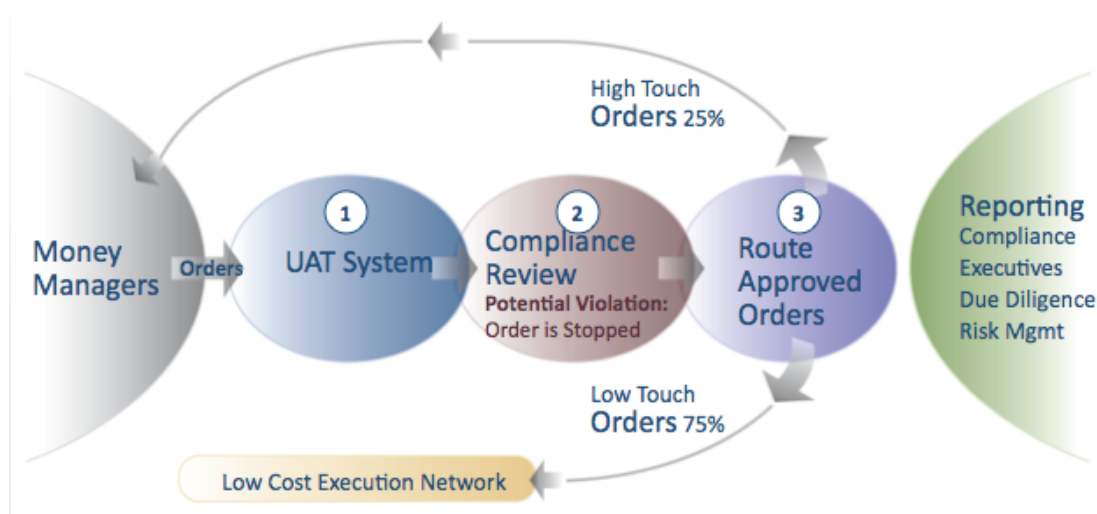
At the center of the UAT System is our patented HiLo Engine, or HLE. The HLE provides a private web services network that collects, in real-time, all orders entered by money managers for execution in the market. Thus, the HLE functions as the default broker routing destination for a money manager's externally managed or sub-advised accounts. As these orders are collected, the HLE routes them to the Plan, Trust or Fund's real-time, rules-based Compliance system. This exception-based compliance review

process highlights, and stops for further review, those orders that trigger a potential violation. Based on the Plan, Trust or Fund’s review, an order may be: (1) released for execution; or (2) canceled or canceled/replaced by the money manager. Compliance-approved orders are available for immediate execution. **Thus, the Plan, Trust or Fund is, for the first time, able to satisfy regulatory requirements that they properly supervise and prevent violations in their external money manager’s activity.**

The HLE also employs a series of customizable rules, incorporating real-time and historical market data, to enable money managers to categorize orders according to their expected market impact. Orders with significant expected market impact and thus requiring special handling—“high touch”—are routed back to the money manager’s trading desk to be carefully “worked” in the traditional manner. Orders that have little, if any, expected market impact and thus not requiring special handling—“low touch”—are immediately routed by the Plan, Trust or Fund to a low-cost brokerage network for automated execution.

Most importantly, the UAT System operates without requiring a money manager to operate an additional trading and compliance system.

The UAT System utilizes an ultra high speed, patented Three Step Process * whereby Money Managers enter orders into their own trading systems:



- ① UAT System Captures The Orders.
- ② Product Sponsor’s Automated, Rules-Based Pre-Trade Compliance Review:
 If Potential Violations Are Detected: Orders are Stopped for Further Review.
- ③ Compliance-Approved Orders Routed For Execution:
 High Touch Orders (25%) Routed to Money Managers to “Work”.
 Low Touch Orders (75%) Auto-Routed To Low Cost Execution Network.
 Real-Time Web-Based Reporting Is Provided to User Groups.

* United States Patent Number 7,685,057

Additional Considerations

A comprehensive and patented solution such as the UAT System is the only way to achieve higher standards of oversight while simultaneously addressing practical operational needs. From a money manager's perspective, the UAT System:

- Creates no additional expense to the money manager. The Plan, Trust or Fund, as UAT's client, pays for the UAT's System's licensing and operating costs.
- Enables continued utilization of the money manager's existing order management system, order entry procedures, compliance review process and trade desk personnel, thereby eliminating any requirement for the money manager to utilize an additional trading system.
- Has no impact on the portfolio manager's investment management process.
- Utilizes web services for all order routing and communication between money managers and the UAT System, thereby protecting the integrity and privacy of the money manager's trading system and proprietary data.
- Provides the money manager real-time control over the parameters governing the HLE's rules for categorizing an order as "high touch" or "low touch".
- Provides the money manager with control over execution of all "high touch" orders, where value is added by the execution expertise of the external money manager's Trading Desk.
- Can be implemented on a gradual basis by a Plan, Trust or Fund on a manager-by-manager or account-by-account basis.
- Requires a one-time integration by a money manager to support all Plans, Trusts or Funds using the UAT System (utilizing standard development specifications provided by UAT, Inc.)
- The UAT System benefits money managers utilizing external asset managers for their proprietary investment portfolios.

With a well-established process, the UAT System provides an automated, efficient, and reliable system to address the needs of the trading process.

With a well-established process, the UAT System provides an automated, efficient, and reliable system to address the industrywide needs of the trading process for externally managed and sub-advised assets. From an operations perspective, the UAT System utilizes a one-time integration and single point-to-point connectivity to a central data hub. Once integrated, a money manager can service all of its external asset management relationships. Again, with a single connection, a Plan, Trust or Fund can work with all of their external money managers and sub-advisers.

While legal and regulatory experts agree that external money managers have a fiduciary obligation to follow a Plan, Trust or Fund's directives on compliance review and order routing directives, the UAT System provides money managers with a number of important benefits through improved fiduciary

oversight and more efficient processes across the industry and in the money manager’s operations. It’s reasonable to say, in fact, that all participants benefit in terms of improved fiduciary oversight with greater transparency, improved oversight, enhanced governance, increased efficiency and lower costs.

Benefits To Money Managers

The UAT System offers significant benefits to money managers as emerging threats to the externally managed and sub-advised industry are addressed in a comprehensive fashion.

Threat: Pressure for Cuts in Asset Management Fees

UAT Solution: **Savings in brokerage costs** create the equivalent of a 5 to 8 bps cut in asset management fees for the Adviser.

Threat: Shift Away From Active Management

UAT Solution: **Real-time data to enable money managers to effectively hedge risk** for living benefits in products utilizing active sub-advised mandates.

Once integrated, a money manager can service all of its external asset management relationships.

Threat: Personnel Reductions on Trading Desks

UAT Solution: **Assignment of all-electronic “low touch” orders** to Plans, Trusts and Funds enables money manager Trade Desks to focus on high-value “high touch” orders.

Threat: Active Plaintiff’s Bar

UAT Solution: **Oversight of all accounts and investment activities** by dual, independent compliance processes to enhance regulatory protection.

Threat: Pressure From Regulators

UAT Solution: **Technology provides consistency in order handling procedures** along with easier fulfillment of fiduciary responsibilities.

Threat: Rogue Trader Scandals

UAT Solution: **Independent pre-trade reviews of all transactions** on separate systems to enhance protection of assets for the Plan, Trust and Fund and their external money managers.

Threat: Money Manager Scandals

UAT Solution: **Independent pre-trade reviews of all transactions** on separate systems to enhance protection of assets for the Plan, Trust and Fund and their external money managers.

Threat: The Financial Crisis

UAT Solution: **Delivery of real-time data to Plan, Trust or Fund** to increase transparency, oversight, cost efficiency and operational effectiveness.

From an industry-wide perspective, the UAT System delivers a comprehensive, practical, reliable and cost-effective solution to the externally managed and sub-advised market's emerging threats as well what were previously thought to be intractable deficiencies in transparency, supervision and control.

The UAT System also offers significant operational and fiduciary benefits to money managers, including:

- **Retain Active Mandates:** In 2009, \$19 Billion in active assets were switched into index mandates in 2009 in VA products. The UAT System's real-time position data enables risk management groups to place intraday hedges at the sector level, thereby assisting in the retention of active mandates.
- **Improved Investment Performance:** Lower brokerage costs improve performance.
- **Less Trading Infrastructure:** All-electronic "low touch" orders move off the money manager's Trading Desk. Time-consuming 'liquidity searches' are replaced by an instantaneous, rules-based and consistent categorization of an order as "high touch " or "low touch."
- **Greater Attention to Block Trading:** The money manager's Trading Desk can focus on important ("high touch") orders to source liquidity, minimize market impact and protect anonymity while the removal of "low touch" orders reduces block size.
- **Enhanced Anonymity Through Low Touch Order Execution:** A Plan, Trust or Fund's execution of "low touch" orders enhances anonymity of these orders.
- **Control Over High Touch and Low Touch Rules:** Money managers may adjust the parameters governing "high touch" vs. "low touch" rules (in real-time) to accommodate market volume and desk manpower.
- **Easy Implementation of a Best Practice:** The UAT System provides a higher level of fiduciary oversight.
- **Industry Standard System:** UAT's multiple United States patent awards (and pending applications) position the UAT System as the industry standard for the \$3.5 TR externally managed and sub-advised industry, thereby eliminating any requirement that money managers integrate with multiple competitor systems.

The UAT System offers significant operational and fiduciary benefits to money managers.

A Promising Future

Money managers are well served by their participation in an industry-wide movement toward achieving a higher standard of fiduciary oversight in their sub-advised accounts, thereby providing greater transparency, improved oversight, enhanced governance, increased efficiency, and lower costs to fund shareholders and plan beneficiaries. It's reasonable to conclude that the UAT System is good for Plans, Trusts and Funds, their external money managers and fund shareholders and plan beneficiaries.

An industry-wide movement toward improved supervision, greater transparency, increased efficiency, and lower costs.

The UAT System represents *the next step forward* for the externally managed and sub-advised industry as innovative technology and industry-wide collaboration achieve a higher level of fiduciary oversight while also providing an impressive array of benefits to Plans, Trusts and Funds and their external money managers. This collaboration will go a long way toward positioning the entire externally managed and sub-advised industry on a solid foundation for a future with rapid growth both domestically and abroad. In the end, the adoption of this higher standard of fiduciary oversight, in addition to benefitting all market participants, is the right thing to do.

"If everyone is moving forward together, then success takes care of itself."

Henry Ford

About UAT, Inc.

UAT, Inc. provides the externally managed and sub-advised industry's patented real-time transparency, supervision and brokerage cost savings system. For more information on the UAT System, please contact Tom Warren at tom.warren@uatinc.com or (303) 881-1825.

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Appendix One: SUMMARY OF APPLICABLE SEC RULES

SEC Rule 38a-1: This SEC Rule governs written policies and procedures reasonably designed to prevent violation of the Federal Securities Laws by the Fund, including the appointment of a Chief Compliance Officer (CCO), reporting requirements to the Board and certification by the CCO that the Fund did not violate the securities laws.

<http://www.law.uc.edu/CCL/InvCoRIs/rule38a-1.html>

SEC Rule 203e-6: Advisers may suffer censure, suspension or revocation due to a failure to reasonably supervise a person or contract to prevent violations, unless established procedures and systems in are place to prevent such violations.

<http://www.law.uc.edu/CCL/InvAdvAct/sec203.html>

SEC Rule 206(4)-7: Adviser must identify conflicts and compliance factors creating risk exposure, including trading procedures and safeguarding client assets, and adopt policies and procedures to prevent violations by the Adviser or any supervised person.

[http://www.law.uc.edu/CCL/InvAdvRIs/rule206\(4\)-7.html](http://www.law.uc.edu/CCL/InvAdvRIs/rule206(4)-7.html)