


**Commonwealth of Pennsylvania
Public School Employees' Retirement System**

DATE: September 19, 2013

SUBJECT: D.E. Shaw Orienteer Fund, LLC Recommendation

TO: Members of the Board

FROM: Joseph W. Sheva, CPA 
Portfolio Manager

At the October Finance Committee meeting, staff and Aksia will recommend that PSERS invest in the D.E. Shaw Orienteer Fund, LLC (Fund). PSERS will be one of two seed investors in this Fund which will leverage D.E. Shaw's investment approaches and technology currently used in their successful hedge fund platform.

This Fund will invest in a diversified range of liquid asset classes and emerging markets seeking to collect global traditional and exotic risk premiums as well as entering into opportunistic alpha trades. Similar to risk parity, this Fund's baseline risk will be allocated equally among four standard strategies (Equities, Nominal Rates, Credit and Inflation), as it aims to generate risk-adjusted outcomes that are complementary or superior to traditional asset allocation approaches. In addition, the Fund will tactically vary risk exposures similar to global tactical asset allocation funds. These tactical shifts will be based on quantitative and qualitative views, including return forecasts, portfolio risk, and financing analysis. Staff feels this will be a good diversifier for our risk parity allocation.

Founded in 1988, D.E. Shaw's senior management team has extensive experience that provides a global macro perspective and risk allocation processes that is industry leading in the hedge fund community. PSERS will benefit from D.E. Shaw's approach to risk management and views on asset allocation.

Staff recommends that the Board invest an initial amount of \$200 million in the Fund, an amount which is within the target ranges established in Exhibit D of the Investment Policy Statement, Objectives and Guidelines as amended from time to time.

Included with this memo are Aksia's recommendation memo, a power point presentation prepared by staff, a power point presentation prepared by D.E. Shaw, and the resolution recommending an investment in the D.E. Shaw Orienteer Fund, LLC. Representatives from D.E. Shaw will make a presentation to the Finance Committee and will be available for any questions.

If you have any questions or comments, please contact me at 717-720-4632.

Manager Recommendation Memo

September 19, 2013

Board of Trustees
Pennsylvania Public School Employees' Retirement System
5 North Fifth Street
Harrisburg, PA 17101

Re: DE Shaw Orienteer Fund, LLC

Dear Trustees:

Aksia LLC, having been duly authorized by the Board of PSERS, has evaluated and herewith recommends a direct allocation to DE Shaw Orienteer Fund, LLC ("Orienteer") in line with the limits and guidelines established by PSERS.

Orienteer is a GTAA fund with an exotic risk premia bucket, running at a 10% volatility target. The four "standard" strategies are: Equities, Rates, Credit, and Inflation, each receiving a baseline 25% of risk (prior to portfolio optimization and macro views). The fifth, Exotic Risk Premia, is added to opportunistically and its risk budget is effectively drawn from the other four. The manager may short any of the asset classes, though it was made clear that the strategy will be long biased, with (on average) 3x long exposure and a smaller, much more variable short side. The fund will primarily trade indices, and obtain leverage through a mix of derivatives and financing.

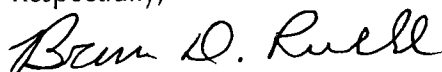
Aksia's recommendation is based upon the following analytical factors and is made within the context of PSERS' investment guidelines:

- Due diligence of Orienteer's investment strategy, including a review of their investment strategy, investment team and structure, and risk management process;
- Due diligence of DE Shaw Heliant's operations¹, including an operations and infrastructure review, regulatory and compliance review, PPM review (Orienteer), and Form ADV review;
- Evaluation of Orienteer's investment strategy within the context of the current investment environment; and
- Appropriateness of Orienteer as a component of PSERS' portfolio.

This recommendation is given solely for the benefit of PSERS and cannot be relied upon by other investors considering an investment in Orienteer, since their needs, objectives and circumstances may not be identical to those of PSERS. The scope of this recommendation is limited to the investment merits of Orienteer. Aksia manager recommendation memos should be reviewed with other Aksia due diligence materials, including the full Investment Review and Operational Review. In addition, please consult your tax, legal and/or regulatory advisors before allocating to any private investment fund.

Please feel free to contact us should you have any questions about this recommendation.

Respectfully,



Bruce Ruehl
Partner, Head of Portfolio Advisory, Americas



Norman Kilarjian
Partner, Head of Relative Value and Tactical Strategies

¹ D.E. Shaw Orienteer is expected to launch in November 2013 and had not commenced operations at the time of Aksia's review. Management stated that the operational processes, the products traded, the pricing procedures, and the relationship with Citco will be substantially the same as those that apply to D.E. Shaw Heliant.



Risk Parity Allocation

D.E. Shaw Orienteer Fund, LLC

October 3, 2013

Joseph W. Sheva, CPA
Portfolio Manager

D.E. Shaw Orienteer Fund, LLC

Market Opportunity

- Using the basic premise that risk drives portfolio returns (so allocate risk and not capital), identify unique and/or differentiating ways to allocate assets and achieve superior risk-adjusted returns versus traditional asset allocation approaches

Fund Strategy

- Full discretion global portfolio allocating risk equally, in a base case, to four long-only standard strategies: Equities, Nominal Rates, Credit and Inflation
- Opportunistic represents a fifth risk allocation bucket
- Liquidity – monthly with 30 days notice
- Leverage – approximately 3 times on average on the long side and a much smaller number on the short side
- Downside Risk - 10% Volatility target with constraints on correlations and tail event risks

Investment Team

- Led by Philip Kearns
- D.E. Shaw internal resources – e.g. Internal Risk Group



D.E. Shaw Orienteer Fund, LLC

Value Proposition for PSERS

- The experience of D.E. Shaw managing risks and constructing portfolios provides a unique opportunity for PSERS to diversify its risk parity allocation
- PSERS can benefit from insights gained from D.E. Shaw's portfolio construction and risk management techniques
- Forming a strategic relationship with a well regarded hedge fund like D.E. Shaw would deepen our understanding of markets, which would be valuable input in managing the total fund asset allocation

Portfolio Use

- Invest \$200 million in D.E. Shaw Orienteer Fund, LLC
- Include this investment in the Risk Parity asset class

History with PSERS

- This investment will be PSERS first investment with D.E. Shaw

Board Issues

- Placement Agent(s): Yes, internal with no monetary compensation
- Political Contributions in PA: None
- Relationships with Aksia: None
- Introduction Source: PSERS Staff

D.E. Shaw Orienteer Fund, LLC

Recommendation

Staff, together with Aksia LLC, recommends (i) that the Board invest \$200 million in the D.E. Shaw Orienteer Fund, L.L.C. and (ii) that the Investment Office shall have the discretion to invest additional sums within the target ranges established in Exhibit D of the Investment Policy Statement, Objectives and Guidelines.

NOTICE: This document was presented to the Public School Employees' Retirement Board at the public meeting at which the Board acted on the resolution to which the information relates. The sole purpose for posting the presentation information on this website is to enable the public to have access to documents that were utilized at a public meeting of the Public School Employees' Retirement Board, and no other purpose or use is intended.