

## HSBC to Add Multi-Leg Support to Fierce

**LONDON**—Developers at HSBC are busily working on adding support for multi-legged trades to the bank's internally developed asset-agnostic trading platform, bank officials tell *DWT*.

The latest work marks the halfway point in the five-year project, which began in 2005 and is dubbed Finance Instrument Enterprise Resources for Consolidation and Execution (Fierce). It will allow HSBC to automate the trading of complex instruments, such as structured products (*DWT*, Oct. 10, 2005).

"The long-term objective is to equip the organization at an infrastructure level to deal with the migration of products that are currently considered too complex to be traded electronically in the electronic trading paradigm," says Ken Yeadon, enterprise e-trading consultant to HSBC.

The bank's immediate goal is to protect the trading of multi-legged instruments by reducing the risk associated with unsuccessful trades.

The typical problem with a multi-legged instrument is that traders execute the first number of the instrument's legs successfully, only having to unwind them as the market moves away and they cannot fill the remaining leg or legs, says Yeadon.

Presently, HSBC uses the liquidity management system from vendor SmartTrade Technologies to aggregate internal and external

fixed-income pools of liquidity in the equivalent of a common limit order book, which also has the capability to join multiple orders for an all-or-none execution.

"That is only possible if the state models underlying the various quotes from which it is constructed have certain properties," says Yeadon. "Understanding how to manage the intersection of these processes at an optimization level is made much less complex by a normalized approach built with the same toolkit, data and logical processes," he adds.

Achieving this capability is a work in progress for HSBC, according to Yeadon, who expects to introduce some of the functionality during the first half of 2008.

### Shrinking Slippage

To reduce the risk of execution slippage—which is often the source of broken trades—HSBC is looking to redefine how trades are made.

"We should be able to construct that process in such a way that instead of traders quoting a price to the market, they quote a spread or some other form of basis relationship to the internal market," says Yeadon. "Our system joins [that spread] to the underlying benchmarks, and displays the result to the consumer as a price," he adds.

When this execution is broken down into its components

as separate tradable units, each is covered separately with the respective liquidity provider in such a way that the traders end up with precisely the risk they assumed in their original pricing assumption, Yeadon explains.

The current platform supports trading interest rate swaps and government bonds, "which are the raw materials for anything more sophisticated," says Yeadon.

HSBC also has been investigating rules-based business logic platforms that it can overlay on top of Fierce and would ease the introduction of new instruments into the system. Bank officials decline to comment on which platforms or vendors it is currently investigating.

"We will implement one functional model first, but we are actually trying to construct it as a referencable design pattern so that you can substitute other instruments in the same workflow with substantially the same logic applied to it," says Yeadon. For example, once the instruments are fed into the SmartTrade engine, the behavior developers have written for one instrument will work for almost anything—developers only have to modify the core business process if the properties of the specific asset need to be exposed to the execution process, or if they change dynamically, he adds.

*Rob Daly*