

## ...EXPLORING THE DARK SIDE OF TRADING (Continued)

Naturally, the major exchanges are keen not to miss out on this bonanza so there are exchange-sponsored venues where dark liquidity might be accessed as well - for instance, NYSE's Matchpoint.

### Technology Impact

All these potential venues to access dark liquidity mean that the need for more connections is growing as the market fragments - speed is not necessarily so important, at least at the moment, but connectivity is and good integration into order management systems is vital. After all, if access to dark liquidity is on a separate terminal it'll never be used.

The fragmentation pattern, necessitating more connectivity and integration, is likely to be replicated in Europe with MiFID comes in affect with new alternative trading venues springing up all the time, such as Chi-X, Project Turquoise (a consortium of several leading investment banks that is expected to challenge the London Stock Exchange and other domestic exchanges), and Equiduct. Many of these are expected to use dark liquidity pools as part of their offering. As Artur Fischer, executive director of the Börse Berlin, the new owners of the pan-European Equiduct exchange, admits: "Some believe if they continue to trade OTC off exchange - in the dark let's say - they're protecting their clients' interests and their own." For this reason, a dark element may be offered with some of the new European trading venues. Speaking at the Sibos show in Boston on 1 October during a session entitled "The 2013 Securities Landscape", Adrian Farnham, a Project Turquoise spokesman who works at Morgan Stanley, confirmed as much when he said: "We've found a way to reconcile dark pools and other trades. Previously OTC business was phoned around the desks but in the future it will be done electronically, we've found a way to do this."

No one knows yet what long-term affect MiFID will have on the markets but a proliferation of trading venues seems certain, perhaps followed by later consolidation as has happened in the US, but one thing is for sure broker-dealers will not want to be caught by the systematic internalisation rules, which require you to reveal quotes and make them transparent to the market.



Neil Ainger  
Editor of Financial Sector Technology

Algo trading also plays into this space with many brokers keen to use algorithms or sophisticated pieces of software to seek out dark liquidity and obliterate it as fast as they can - Credit Suisse's Sniper programme does just this.

The buy-side, or fund managers acting for pension or hedge funds, will of course want to protect their liquidity and avoid sharp practices by the sell-side so a certain tension will exist. Dark liquidity aggregator algorithms are however certainly a likely future trend in this area. Another likely development is the spread of dark pools of liquidity into other niches. What started out as a challenge to traditional brokers in the crossing of large block trades may well spread to other areas with dark pools becoming common in many different niches as the buy-side seeks to protect its anonymity.

Of course, the regulatory and societal differences between Europe and the US mean that the uses to which dark liquidity is put will differ slightly but there seems little doubt that Europe is moving to the dark side as the day of the MiFID looms and markets become more automated and transparent. Asia is likely to follow the trend too and go dark. In the end though, regulators on both sides of the Atlantic and around the world will catch up with what is going on and force dark pools of liquidity out into the light, requiring them to be more transparent and regulated as their popularity grows. As often happens, it is at this point that another alternative way to trade away from prying eyes will probably be invented by some smart player and the market-place will once again shift.

## ...FIX Update: FIXatdl<sup>SM</sup>

High End Algorithmic Trading With No Changes to Standing FIX Connectivity Networks  
By FPL Exchanges and ECNs Working Group

Over the past two years, volunteer members at FIX Protocol Limited (FPL) have been extremely busy developing the FIX Algorithmic Trading Definition Language (FIXatdl<sup>SM</sup>). This new standard allows sell-side firms to rapidly offer new algorithmic trading strategies in an industry standard XML format, enabling buy-side clients to access new order types with much less effort, and with dramatically reduced timeframes. Essentially, it provides a strict publication template that is used to express three areas: 1) the specific, custom algo parameters 2) details on how to automatically draw the new algo order tickets on trader's workstations, and 3) explicit rules that operate in the background to eliminate problems before they actually occur. Optional help text, and rich GUI features are also contained in the standard that enable high touch interaction to occur throughout the order build process, from start to release.

All of this has been achieved in a manner that enables buy-side users to continue utilising their existing FIX infrastructure, without any network changes. While FIXatdl<sup>SM</sup> uses XML to express the particulars of the algorithmic order, it also contains an unambiguous map to the widely deployed FIX protocol. The XML part of the standard is entirely consumed in the front end of the OMS. New order messages that emerge from those systems, remain in traditional "plain vanilla" FIX format. The output messages may be easily set to any FIX version from FIX 4.0 forward. Additionally, network traffic may actually be reduced as a single algorithmic order, transmitted one-time, may replace dozens of more traditional market and limit orders.

FIXatdl<sup>SM</sup> is currently in its final stages of Beta testing and is expected to be finalised and released early this year. Given the groundswell of momentum and the broad participation to date, it's sure to be a crowd pleaser. To find out more about FIXatdl<sup>SM</sup> visit [www.fixprotocol.org/working\\_groups/algowg/documents](http://www.fixprotocol.org/working_groups/algowg/documents)

For more information on FIX please visit [www.fixprotocol.org](http://www.fixprotocol.org)

## ...News Round-up

- TNS has announced its connection to the Singapore Stock Exchange (SGX) securities platform for the distribution of SGX market data information to the global marketplace. A fully managed connection to TNS' Secure Trading Extranet will enable SGX's global customers to receive market data both in securities and derivatives markets, and allow seamless connectivity for major financial institutions based outside the country's boundaries. To date, access to SGX's market data has been limited to a few major network providers and direct connections from its customers.
- One of Germany's leading full service IT providers for exchange and finance businesses, ICF Systems, has enhanced its services to clients with fast, secure and reliable trading connectivity provided by TNS' Secure Trading Extranet. TNS is working with ICF Systems to outsource connectivity and give customers using its IT systems a single scalable, fully managed connection, where previously several leased lines may have been required. This single connection will enable firms to access multiple services, such as trading, market data and trading applications.



## ...Trading Places

11 - 12 February  
MEFTEC 2008

Bahrain  
Contact: +44 (0)1423 524 545  
[www.meftec.com](http://www.meftec.com)

12-14 February  
e-Trading 2008

London  
Contact: +44 (0)207 743 9320  
[www.sifma.org](http://www.sifma.org)

19-21 February  
TradeTech FX

New York  
Contact: +1 888 482 6012  
or +1 973 256 0211  
[www.wbr.co.uk](http://www.wbr.co.uk)

3-6 March  
TradeTech USA

New York  
Contact: +1 888 4826012  
or +1 973 256 0211  
[www.wbr.co.uk](http://www.wbr.co.uk)

## Contact us

- would you like further information on any services or applications available over our Extranet?
- do you have a comment or question about one of the articles?

Please get in touch

Email [financial@tnsi.com](mailto:financial@tnsi.com)  
Web [www.tnsfinancial.com](http://www.tnsfinancial.com)

# XCHANGE

Transaction Network Services

[www.tnsfinancial.com](http://www.tnsfinancial.com)

Issue 6

## DARK POOLS OF LIQUIDITY



## Inside:

...Foreword

...Trading Places

...News Round-up

...Exploring the Dark Side of Trading

...FIX Update: FIXatdl<sup>SM</sup>

...An Interview with Chi-X

# FOREWORD

## Tapping more efficient markets

Welcome to 2008 and another issue of the Xchange newsletter. This issue takes an in depth look at the phenomenon of liquidity, one of the biggest challenges facing global financial markets today.

Neil Ainger, editor of Financial Sector Technology magazine looks at the rising popularity of dark pools of liquidity and the role they are playing in today's financial markets. Neil discusses how dark pools have evolved and what has driven their growth in popularity in addition to considering how new legislation is influencing the take up. He also consults with industry spokespeople such as Adrian Farnham of Project Turquoise from Morgan Stanley and David Easthope, a senior analyst at Celent.

TNS' John Owens, vice president for exchanges and ECNs, catches up with Hirander Misra from Chi-X to find out what has changed at the pan-European equity alternative trading system now it has become a multi-lateral trading facility under MiFID. Hirander also considers the liquidity challenges facing Chi-X and its customers and the role dark pools will play in the future as the industry evolves.

The FPL Algorithmic Trading Working Group provides an update on the development and launch of the FIX algorithmic trading definition language following the completion of its beta phase, and sets out how it will enable adopters to benefit from a reduction in the deployment of effort required to roll out new algorithmic order types.

If you have any comments on any of the issues raised in this edition of Xchange or there's anything you would like to see in a future issue, please get in touch using the contact details on the back page.

Alex Walker  
Senior Vice President and General Manager  
TNS Financial Services Division

# CHI-X - THE PAN-EUROPEAN EQUITY ATS

Launched as an alternative trading system in the Spring of this year and now a multi-lateral trading facility under MiFID, Chi-X Europe is an indirect subsidiary of Instinet. TNS' vice president for exchanges and ECNs, John Owens, talks to director Hirander Misra, about the growth in liquidity and the associated challenges facing the financial markets.

## Chi-X was the first order driven pan-European equities alternative trading system. Where did the idea for Chi-X come from?

Chi-X was essentially conceived to help the financial markets address the challenges presented by MiFID, but at the same time embrace the real commercial opportunities that the changing legislation offers. In removing the concentration rules, setting out principles for best execution, as well as pre and post order transparency, MiFID has fundamentally changed the landscape of the European financial markets. Coupled with substantial improvements in technology, the rapid take up of FIX, and demands for a faster and cheaper alternative to trading on-exchange, the market was ripe for development.

## Why have systems, such as Chi-X, never been done in Europe before?

Competition to the exchanges has been attempted in the past, but the climate has not been right until now. Previous attempts to establish alternative trading venues lacked a suitable regulatory driving force, were plagued by restrictive concentration rules and did not have the diverse technology we have today. They struggled to attract real liquidity as clients had trouble connecting and accessing different liquidity pools.

Under MiFID this has changed and multi-lateral trading facilities can cross borders into previously difficult to trade with markets, opening doors to extensive pools of liquidity. We are actively engaging in an ambitious growth strategy to extend our coverage - we currently list the UK FTSE 100, Dutch AEX 25, German DAX 30 and French CAC 40 component stocks - and will be announcing new markets as they are introduced.

## Why are multi-lateral trading facilities essential to creating additional liquidity in the financial markets?

In Europe, until recently all key visible liquidity has been on the primary exchanges. Now, with MiFID implemented, the previously constraining concentration rules disappear, allowing wider participation and trading across Europe. This presents opportunities to build liquidity in those markets.

As the first live pan-European order driven Multilateral Trading Facility (MTF), we are witnessing a new coming to Europe. MTFs provide additional options for financial institutions by offering lower latencies and larger capacities. We have super fast FIX connectivity directly into the core matching engine, allowing us to offer external latencies of just two milliseconds, which is up to 10 times faster than the quickest European exchange. This means that traders can react to price movements faster, and take advantage of arbitrage opportunities from different markets trading the same instruments.

In addition to this, Chi-X can handle up to 30,000 messages a second. This highly scalable level of capacity ensures transactions are processed as soon as they arrive, without queuing. We placed considerable importance on these elements during our design and development phase, as it is essential that whilst offering fast access, we support this low latency with the appropriate capacity. This is particularly vital as the growth in algorithmic trading is resulting in more and more volume coming onto the market. If capacity is constrained those orders will be queued, adding to latency.

## What other benefits are there?

Execution costs on Chi-X are up to 90 per cent cheaper than those of the existing European exchanges. In addition, trade prices on Chi-X have on average typically been better as a whole and inside the spread of the primary exchanges and these price improvements - on average around two to three base points - can be passed upstream. Buy-side firms and end investors benefit in terms of better performance, potential lower market impact as well as enjoying new trading opportunities as a result of pre and post rate transparency rules under MiFID articles 27 and 28. Chi-X's public market data feed is also fully visible and available free of charge.

## Will fragmentation of liquidity become an issue?

With new liquidity sources coming to market, the industry will undoubtedly experience a heightened level of fragmentation, but technology will knit this back together. In an era of mass technology, fears about inefficiencies and worse prices on order books are unfounded. Shared algorithms, smart routing and data consolidation will permit transaction information to flow seamlessly across numerous venues, allowing securities to be traded on multiple platforms.

## How might increased European liquidity affect the global market and the way we do business?

As you would expect, other markets, particularly in Asia, are watching European developments with great interest. Every market is interested in offering investors global opportunities and cross border trading and access to multiple pools of liquidity in Europe.

The US experience demonstrates that if you drop the price, demand naturally goes up, so cheaper execution costs in Europe will generate an increase in volume available to the global market.

Technology is a great enabler. The real challenge is to establish links with markets, which could not be connected before. Traders will benefit from the industry pie getting bigger; but they will need to invest in the technology to capitalise on this, otherwise they will likely miss out on a great commercial opportunity.

## Will clearing and settlement issues created by cross border trading hinder improved liquidity?

This is currently an area of hot industry debate in Europe. In the US there is one market model and common functionality across the trading venues, supported by the Depository Trust and Clearing Corporation for clearing and settlement.

In Europe the landscape is much more complex, given the number of different trading venues. The primary exchanges are strong in their own domestic markets and are typically vertically integrated with clearing and settlement systems.

Chi-X has worked with Fortis Bank to create a new pan-European Central Counterparty (CCP) called European Multilateral Clearing Facility NV. (EMCF). EMCF facilitates clearing at 50 per cent of the current primary exchange CCP costs, with settlement on a cost recovery basis.

Horizontal integration is possible as we have decoupled trading, clearing and settlement rights, which ensures that the transaction completes within the domestic Central Securities Depository (CSD) based on a client's existing work flows.

We believe that the European trading, clearing and settlement framework requires greater competition. It is this competition which will drive down the costs of trading, clearing and settlement across Europe which is ultimately in the interests of the end investor.



Hirander Misra  
Director

# ...EXPLORING THE DARK SIDE OF TRADING

Neil Ainger, editor of Financial Sector Technology

A 'dark pool of liquidity' might sound like a Texan oilman's dream of striking it rich while drilling but in the financial services sector it refers to undisclosed trades. Neil Ainger looks at the rising popularity of these hidden pools in the US and wonders if they are set to take off in Europe with the arrival of the EU's Markets in Financial Instruments Directive (MiFID).

Are traders moving to the dark side, shying away from the light of regulated markets like vampires avoiding the sun? If the evidence of the US is anything to go by then the answer has to be yes although, of course, it's not due to a rabid blood sucker but thanks to one of the oldest rules of the market - if you can keep your trade secret and avoid it adversely impacting the market and moving the price against you then you should. A dark pool can potentially allow you to do this, which is why Goldman Sachs has its Sigma X system (the largest dark pool currently out there) and UBS its PIN platform.

According to the US consultancy firm Tabb Group and its latest study entitled Groping in the Dark, dark pools of liquidity already account for approximately ten per cent of equity volumes, with an average of 4.2 billion US shares traded daily, a figure that is rising rapidly. Some industry commentators even believe dark liquidity could eventually account for nearly half of all trades in the future, with Tabb predicting an annual growth rate of 43 per cent, and supremacy for dark pools of liquidity over traditional stock exchanges by 2010. The growth in dark liquidity may well cross the Atlantic to Europe, especially with the EU's MiFID directive, which is expected to push public disclosure of prices and best execution to the fore. A natural reaction to this might be to seek out dark pools of liquidity in Europe where such information can remain hidden.

In the US, where these dark pools arose in the late 90s, one of the initial drivers for their popularity was when the order handling rules were changed, allowing ECNs (Electronic Communication Networks) to get a market position and 'iceberg' orders - where only a small proportion of the order is visible - to gain a foothold. The process was further helped by the more recent RegNMS rules, which have further encouraged the practice. The deterioration of the relationship between the buy and the sell-side in the US, after a number of scandals such as anti-competitive tick pricing of Nasdaq securities by dealers, questionable research, information leakage and conflicts of interest over proprietary trading, also contributed to their growth.

You could argue though that dark pools have always existed. "Sending an order to an NYSE floor broker, having him write out the ticket and then put it in his pocket could count as one, depending upon your definition," says David Easthope, a senior analyst at Celent. "It just happened before the practice got technological."

In a sense then dark pools of liquidity have always been with us. The best definition of them in their modern form though is as a non-displayed order type. "That is to say there is no information revealed prior to a trade actually occurring and there's much more limited information post trade as well," adds Easthope.

In terms of where dark liquidity resides there are a number of different sources. It can reside on crossing networks, where shares can be exchanged without parties knowing who is on the other side - potentially dangerous but still attractive. The larger brokerage firms, such as Lehman Brothers with its LX system, also have their own internalised dark pools of liquidity. A number of independent platforms, such as ITG's Posit and Liquidnet, have also arisen, to offer alternative venues and indeed these independents have already taken a large chunk of the traffic in the US - a fate large investment banks will be keen to avoid on this side of the Atlantic. Broker consortiums, who don't want to pay fees and instead follow a utility model, such as the eBX Level platform, have also sprung up, as have tech company offerings such as NYFX Millennium.