



# TRANSPARENCY AND REPORTING UNDER MiFID

## CALL FOR EVIDENCE

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## 1. Executive Summary

The introduction of MiFID to the EEA financial market place requires participants to share additional information both pre- and post-trade to create a single, transparent virtual market in securities.

This goal is highly complex but will be made more achievable if all market participants speak the same language. The obvious choice of language is the one that is most widely spoken by participants.

In the case of financial markets, that language is FIX. A clear recommendation from CESR to use FIX reduces uncertainty, lowers cost, eliminates the risk of multiple systems being used throughout the lifecycle and across geographic zones. Such a recommendation minimizes costs for participants and increases the likelihood of a successful implementation of MiFID.

## **2. Introduction**

MiFID will have a major impact on financial messaging protocols. Implementation of the Directive will introduce new business flows to the European capital markets which in turn will require messages to carry new types of information. This need can be met either by adapting existing messages or, in extremis, by creating new ones.

Whichever approach is taken, there will be a requirement to express new data elements and business rules between industry participants. The increase in message volume that will be created by MiFID's pre- and post-trade transparency requirements means that unless standardisation and interoperability throughout the business process, from price quotation through to post-trade messaging, are achieved, the cost to EEA market participants will vastly outweigh the benefits that the Directive is designed to achieve. This cost will ultimately be borne by the end consumers: retail investors. The current implementation deadlines mean that there is insufficient time to create and implement new protocols and messages, and the cost of changing between protocols for each step in the process would be prohibitive.

### **2.1 Choice of Protocol**

All of the MiFID transparency and reporting requirements can be met by using the Financial Information eXchange (FIX) Protocol which is currently in production in various markets around the world. The recommended enhancements to FIX are minor in nature and are largely confined to the addition of MiFID-specific data labels.

### **2.2 Meeting Transparency Goals**

Pre-trade transparency and order-handling are covered in many markets using FIX, with many more currently adopting it. It is widely used in the exchange-traded derivatives market for Post Trade Reporting. More details are supplied in sections 5 and 6.

### **2.3 Transaction Reporting and Information Sharing**

FIX provides an opportunity for Competent Authorities (CAs) to allow firms to send transaction reports via their existing preferred financial protocol and thus obviate the need for translation and mapping at the CA. It therefore also offers CAs the ideal protocol for information sharing between themselves.

## **3. Requirements Analysis**

The MiFID Joint Working Group (JWG) Standard Protocols Subject Group (SPSG) is chaired by FIX Protocol Limited (FPL). As part of its work, the SPSG published a plain English analysis document covering the changes to messaging protocols arising from MiFID. Taking this document as a baseline, FPL has conducted a technical gap analysis of the changes required to make the current version (FIX 4.4) meet all of the known messaging requirements of MiFID and this document represents a very brief summary of that analysis<sup>1</sup>.

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<sup>1</sup> A full explanation of the updates to FIX 4.4 can be found at :  
[http://fixprotocol.org/documents/2527/MiFID\\_FPL\\_Gap1.4.doc](http://fixprotocol.org/documents/2527/MiFID_FPL_Gap1.4.doc)



Furthermore, the SPSG concluded, by majority decision, that a single standard was the only way to achieve MiFID's goals and that FIX was the most appropriate standard. The following statement was released by the co-chairmen of the SPSG.

*"The standard protocols group conducted a review of multiple industry protocols in order to assess their suitability for MiFID requirements. During the course of this work, the SPSG received a significant amount of feedback from participants and interested parties that the objective of making multiple standards recommendations was not desirable. Concern was expressed that multiple protocol recommendations, each with their own variations in suitability would simply serve to increase confusion over MiFID project management, rather than reduce such confusion.*

*"At the official MiFID JWG conference on 7<sup>th</sup> December 2005 in London, the co-chairmen of the SPSG conducted a "straw poll" vote of over 100 delegates to ask for further feedback on this issue. The result of this poll was that a majority of approximately 70% of the audience agreed that the SPSG should make a single standard recommendation. The SPSG then referred this decision to the Chair of the JWG, and the decision was made that this should be the course of action that the SPSG should take.*

*"Following further work, the SPSG made the recommendation to the JWG that FIX Protocol was the protocol most suited to the requirements identified for MiFID compliance."*

## 4. Achieving Harmonisation

The Giovannini report identified differences in standards and technology as one of 15 barriers to market harmonisation. It would be a shame if MiFID and CESR created a 16<sup>th</sup> barrier either by failing to recommend a single protocol or by recommending an inappropriate one. Our belief is that any recommendation must ensure that data can be easily consolidated and furthermore, that the recommendation should be based on the 'leverage' principle established by the Giovannini process of adopting the most widely-implemented standard.

**There is only one existing, widely used open messaging standard that is capable of covering the entire spectrum of MiFID flows from quotation through to transaction reporting, and that is FIX 4.4.**

## 5. Current Use of FIX

### 5.1 Pre-trade Transparency and Order Handling

FIX has long been the industry standard for electronic trading, covering the spectrum from indications of interest, advertisements, quotes, orders and executions through to allocations and confirmations. Thanks to the recent development of FAST (FIX Adapted for STreaming Data) Protocol<sup>1</sup>, it is attracting an increasing level of interest

<sup>1</sup> A good, non-technical overview of FIX Adapted for STreaming Data (FAST) can be found at: [http://www.fenews.com/fen48/inside\\_black\\_box/black\\_box.html](http://www.fenews.com/fen48/inside_black_box/black_box.html)



in the market data space. FAST is a compaction methodology that compresses market data messages (FAST is not limited to market data messages - in the US there is strong interest to use it for order submission for algorithmic and other high volume trading), enabling more data to be sent over the same bandwidth with less latency. US exchanges CME, ArcaEx and International Securities Exchange have already stated that they will support FAST. The LSE and SGX have also indicated their support.

Deutsche Börse Systems, a technology subsidiary of Deutsche Börse Group, and OMX are joining forces to help define a 'Harmonized Exchange Standard' using FIX. A recent joint press release goes on to state,

*"Proprietary exchange interfaces will continue to play an important role, but FIX has the potential of becoming a common standard across exchanges. Discussions are currently underway to enable the jointly defined exchange FIX standard to be aligned with FIX Protocol Ltd."*

OMX and Deutsche Börse Systems technology is used to operate over 60 exchanges world-wide, many of which are located in the EEA.

The Australian Stock Exchange (ASX) will introduce low-latency market data services in 2006, using FIX. This will allow ASX to offer a fully integrated FIX trading and market data platform for all ASX-traded instruments, covering equities, warrants, options, futures and interest rate securities.

In the US the OTC market uses FIX for intra-market communication of Best Bid and Offer (BBO). The NASDAQ Market Center also uses FIX for all NASDAQ National Market and NASDAQ Capital Market (NCM) securities, as well as for exchange-listed securities. NASDAQ's ACES system uses FIX to route orders between order-entry firms and market makers that have established relationships, providing an advanced order routing tool. ACES streamlines routine order entry by routing orders directly into the market makers' internal system for execution and routing the execution notification back to the order-entry firms.

The message volume generated by pre-trade and trading activities dwarfs that generated by post-trade activity. ArcaEx, now part of the NYSE Group, generates an average of 180 million FIX order and execution messages per day with a peak of 248 million (2005 figures). This compares with a peak volume of 12 million messages per day for the SWIFT FIN network.

## **5.2 Post-trade Transparency**

In the equities markets as part of their Market Center service, NASDAQ offers a trade reporting system (ACT). ACT offers an automated trade reporting and reconciliation service. It electronically facilitates price and volume reporting, comparison and clearing of trades for NASDAQ-listed and Over-the-Counter (OTC) securities as well as for transactions in exchange-listed securities that occur off the floor<sup>1</sup>.

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<sup>1</sup>

<http://www.nasdaqtrader.com/trader/tradingservices/productservices/productdescriptions/fixdescription.stm>



In the US, the majority of exchange-traded derivatives trade reporting is carried over FIX. ArcaEx also uses FIX for trade reporting. Another US user of FIX is the NYSE's Front End Systemic Capture (FESC) Drop Copy Application.

According to the President of the FIA (Futures Industry Association), *"In the U.S. all major futures exchanges and clearinghouses are committed to FIXML as well as The Options Clearing Corporation. Currently, more than 119 million [post-trade] messages are communicated daily using FIXML."*<sup>1</sup>

### 5.3 FIX Protocol's Use of Data Standards

The FIX Protocol supports many ISO data standards including:

- ISO 3166-1:1997 (Country codes)
- ISO 4217:1995 (Currency codes)
- ISO 6166:2001 (ISIN)
- ISO 9362:1994 (Bank Identification Codes)
- ISO 10383:1992 (Market Identifier Codes)
- ISO 10962:2001 (Classification of Financial Instrument (CFI) codes)

## 6. Future Use of FIX

As illustrated in the examples above, FIX has established itself as a clear leader in the search for a protocol capable of being used to develop a pan-European consolidated quote and consolidated tape model, similar to those that exist in the US.

FPL's gap analysis has recommended changes to the FIX Trade Capture Report Message to allow it to be used for transaction reporting and for information sharing between CAs. The adoption of FIX by CAs will significantly reduce the IT overhead that would be created by adopting a infrastructure based on multiple message standards.

## 7. Messaging in the post-MiFID environment using FIX

This section gives a summary of each element of MiFID's messaging requirements and the existing FIX 4.4 messages that have been adapted to meet them.

### 7.1 Pre-trade Transparency

| Activity                                                 | FIX Message                                                                |
|----------------------------------------------------------|----------------------------------------------------------------------------|
| Quote dissemination                                      | 1. Market Data Snapshot Full Refresh<br>2. Market Data Incremental Refresh |
| Quote dissemination as a market-maker within an exchange | 1. Quote<br>2. Mass Quote                                                  |

### 7.2 Order Handling

| Activity                      | FIX Message      |
|-------------------------------|------------------|
| Order for single security     | New Order Single |
| Order for multiple securities | New Order List   |

<sup>1</sup> See <http://www.futuresindustry.org/fimagazi-1929.asp?iss=165&a=1107>



### 7.3 Post-trade transparency

| Activity                                                                 | FIX Message              |
|--------------------------------------------------------------------------|--------------------------|
| Create post-trade report                                                 | Trade Capture Report     |
| Acknowledge receipt of post-trade report and confirm publication details | Trade Capture Report Ack |

### 7.4 Transaction reporting and information sharing

| Activity                        | FIX Message          |
|---------------------------------|----------------------|
| Transaction reporting           | Trade Capture Report |
| Information sharing between CAs | Trade Capture Report |

## 8. Data Requirements

As part of its technical gap analysis, FPL has identified the new or modified data elements that will be created by MiFID. The key requirements are:

1. Unambiguous identification of securities
2. Unambiguous identification of entities
3. Identification of the roles being played by the entity – RM, MTF, SI, quote initiator, eligible counterparty etc. It also recognises the fact that a single entity can play multiple roles within any given process.

In section 10, a number of issues are identified which the draft Level 2 documentation does not appear to address.

FPL recognises that existing data standards should be used wherever possible and that market practice should be the driver of how data is used. A small sample of the required data elements identified by FPL's most recent gap analysis is set out below. Some of these have already been identified by CESR's Technical Task Force in their document CESR/05-398 Appendices. These fields will be incorporated into the FIX data dictionary. FPL has also taken into consideration some of the unintended consequences of MiFID. For example, owing to the complex definition of best execution, settlement costs may play a major role in brokers' decisions of how to meet their obligations. When a quote is published by an exchange or MTF, the potential buyer or seller knows where the resulting trade will settle. This is not the case with a quote from an SI unless the place of settlement (PSET) is provided as part of the quote. The decision, based on the dictates of best execution, whether or not to trade with an SI will be strongly influenced by PSET and so it should be made available as part of the quote.

FIX 4.4 is already in the process of being adapted to accommodate these new and modified fields. As mentioned earlier, use of FIX will be of particular value to CAs who do not currently have the infrastructure to share information amongst themselves but will be able to benefit from existing, proven FIX messages with minimal implementation costs.



## 9. Data Dictionary Overview

This section gives a non-technical overview of some of the data fields that will need to be carried to support message flows in the post-MiFID environment. It is not exhaustive but illustrates the data types required and their use in the MiFID process.

### Abbreviations:

PRT – Pre-trade transparency  
OH – Order handling  
PTT – Post-trade transparency  
TR – Transaction reporting  
IS – Information sharing

### Data Dictionary

| Data Type         | Data Field                                                                                           | MiFID Process        |
|-------------------|------------------------------------------------------------------------------------------------------|----------------------|
| Security          | Security identifier (Alphanumeric sedol + MIC)                                                       | PRT, OH, PTT, TR, IS |
|                   | PSET                                                                                                 | PRT                  |
|                   | Instrument type (ISO 10962)                                                                          | PRT, OH, PTT, TR, IS |
|                   | Underlying instrument type (ISO 10962)                                                               | PRT, OH, PTT, TR, IS |
| Entity Identifier | BIC, IBEL, MIC, Participant code, Infrastructure provider ID                                         | PRT, OH, PTT, TR, IS |
| Time              | Time as offset from UTC                                                                              | PRT, PTT, TR, IS     |
| Entity Role       | CA - Competent Authority                                                                             | TR, IS               |
|                   | CAL – Competent Authority of the most relevant market in terms of liquidity                          | TR, IS               |
|                   | CATV – Competent Authority of the Transaction Venue (Execution Venue)                                | TR, IS               |
|                   | Host CA – Competent Authority of the country where the Investment Firm is operating                  | TR, IS               |
|                   | Home CA – Competent Authority of the country where the Investment Firm is registered or incorporated | TR, IS               |
|                   | RM – Regulated market                                                                                | PRT, OH, PTT, TR     |



| Data Type       | Data Field                                                                                           | MiFID Process        |
|-----------------|------------------------------------------------------------------------------------------------------|----------------------|
|                 | MTF – Multi-lateral Trading Facility                                                                 | PRT, OH, PTT, TR     |
|                 | SI – Systematic Internaliser                                                                         | PRT, OH, PTT, TR     |
|                 | Market Maker                                                                                         | PRT                  |
|                 | Quote publication medium                                                                             | PRT                  |
|                 | Report Publication medium                                                                            | PRT                  |
|                 | Underlying client                                                                                    | TR                   |
|                 | Eligible counterparty                                                                                | PRT, OH, PTT, TR     |
|                 | Professional client                                                                                  | PRT, OH, PTT, TR     |
|                 | Retail client                                                                                        | PRT, OH, PTT, TR     |
|                 | Execution venue                                                                                      | OH, PTT, TR          |
|                 |                                                                                                      |                      |
| Data qualifiers | Auction clearing price                                                                               | PRT                  |
|                 | Potential volume at auction clearing price                                                           | PRT                  |
|                 | Indicator to show that exchange of shares was determined by factors other than current market value. | PTT, TR              |
|                 | Best execution required                                                                              | OH                   |
|                 | Number or percentage of part-filled limit order to be shown to the market                            | OH                   |
|                 | Negotiated trade flag                                                                                | PTT, TR              |
|                 | Identify trades subject to delayed reporting rules                                                   | PTT                  |
|                 | Liquid share flag                                                                                    | PRT, OH, PTT, TR, IS |
|                 |                                                                                                      |                      |
|                 |                                                                                                      |                      |





## 10. Issues

This section gives a brief overview of some of the messaging issues arising from the draft Level 2 texts.

1. Use of time as offset from UTC. Not only does this proposal run counter to established industry practice but it creates huge scope for confusion when for example an investment firm, its home CA, the CATV and the CAL may all be in different time zones. FPL would note that its standard uses UTC for all timestamps and that this proves adequate for large firms that are routing orders into over 100 markets globally in a majority of the worlds time zones. FPL therefore recommends that UTC be used for all timestamps.
2. Regulatory oversight of post-trade transparency reports. The current regime of trade reporting via exchanges limits the ability of firms to manipulate the market by means of inaccurate trade reporting. Most exchanges impose sanctions for late and/or inaccurate reports. However, under the proposed MiFID reporting regime, there is no means of overseeing reporting done via third parties. The problem will be exacerbated by allowing SIs to submit anonymous post-trade reports followed by a consolidated report every 3 months. Unless these issues are addressed, standards of accuracy and timeliness will inevitably suffer.
3. Lists of SIs and liquid shares: these lists need to be updated and published daily and not annually.