



MiFID GAP ANALYSIS - FIX 5.0

MiFID JWG - Standard Protocols Subject Group

Version 2.0 Dated 22 Oct 2006



FIX 5.0 DRAFT GAP ANALYSIS FOR MiFID

1. Executive Summary and Introduction	3
1.1 Key definitions used in this paper.....	3
1.2 Methodology.....	3
1.3 Assumptions.....	4
1.4 Scope	4
1.5 In Scope	4
1.6 Out of scope	4
2. The Level-2 Documentation.....	4
2.1 Relevant Articles in the Implementing Measures	5
2.1.1 Directive.....	5
2.1.2 Regulation	5
3. Changes and Issues	5
4. Summary of Recommendations.....	7
4.1 Pre-trade	7
4.1.1 Recommended Amendments.....	7
4.2 Order Handling	7
4.3 Post-trade Transparency.....	7
4.4 Transaction Reporting	8
5. Summary of Proposed Changes to FIX 5.0	8
6. High-level Requirements.....	11
7. Pre-Trade Transparency.....	12
7.1 MiFID Articles	12
7.2 Participants Affected	12
7.3 Products Affected	12
7.4 Quote Models under MiFID	13
7.4.1 Quote Process - FIX Message Options	13
8. Business Requirements	13
8.1.1 Participant.....	13
8.1.2 Product.....	14
8.1.3 Process.....	14
8.2 Capability Gaps	14
8.2.1 Requirements to Meet Gaps.....	15
9. Order Handling.....	17
9.1 MiFID Articles	17
9.2 Participants Affected	17
9.3 Products Affected	17
9.4 Order Handling under MiFID	18
9.4.1 Order Process - FIX Message Options.....	18
9.5 Business Requirements	18
9.5.1 Participant.....	18
9.5.2 Product.....	18
9.5.3 Process.....	18
9.6 Capability Gaps	18
9.6.1 Requirements to Meet Gaps.....	19
10. Post-trade Transparency.....	19
10.1 MiFID Articles	19
10.2 Participants Affected	20
10.3 Products Affected	20
10.4 Post-trade Transparency under MiFID	20
10.4.1 Post-trade Transparency - FIX Message Options	20
10.5 Business Requirements	20
10.5.1 Participant.....	20
10.5.2 Product.....	20



10.5.3	Process.....	20
10.6	Capability Gaps	21
10.6.1	Requirements to Meet Gaps.....	21
11.	Transaction Reporting	25
11.1	MiFID Articles	25
11.2	Participants Affected	25
11.3	Products Affected	25
11.4	Transaction Reporting under MiFID	25
	Transaction Reporting - FIX Message Options.....	26
11.5	Business Requirements	26
11.5.1	Participant.....	26
11.5.2	Product	26
11.5.3	Process.....	26
11.6	Capability Gaps	26
11.7	Proposed Reporting Fields.....	27
11.7.1	Table 1: List of fields for reporting purposes	27
11.7.2	Issues with Table 1	29
11.7.3	Table 2: Further details for use by Competent Authorities	30
12.	Parties block in FIX 4.4 and 5.0	30
13.	MiFID Changes Summary	31

Document control

Author	Date	Version	Changes
Simon Leighton-Porter	28 Oct 05	1.0	Original
Simon Leighton-Porter	3 Nov 05	1.1	Correction of typos. Inclusion of ISO and MDDL analysis
Simon Leighton-Porter	23 Nov 05	1.2	Updates based on industry feedback
Simon Leighton-Porter	27 Mar 06	1.3	Updates to include draft Level 2
Simon Leighton-Porter	18 Apr 06	1.4	Updates based on feedback from FIX GTC
Simon Leighton-Porter	2 May 06	1.5	Further updates from GTC
Simon Leighton-Porter	10 May 06	1.6	Further updates from GTC
Simon Leighton-Porter	2 Oct 06	1.7	Further updates from GTC. Changes arising from the 5.0 spec
Simon Leighton-Porter	3 Oct 06	1.8	Changes following GTC call
Simon Leighton-Porter	22 Oct 06	2.0	Final version

See section 3 below for details of changes.



1. Executive Summary and Introduction

This paper analyses the impact of MiFID on business processes and proposes changes to the FIX 5.0 spec in order to meet this challenge.

FIX 4.4 and 5.0 are the only messaging options which are currently able to cover the entire spectrum of processes and products affected by MiFID: pre-trade transparency, order handling, post-trade transparency and transaction reporting. The changes¹ proposed to the FIX specification are relatively minor and consist of a small number of new fields and enumerations. No new message types are required. This document forms the basis for Extension Pack 26 (EP26) to the FIX 5.0 pre-release.

In October 2006, the Committee of European Securities Regulators (CESR) launched a public consultation on “Publication and Consolidation of MiFID Market Transparency” so it is possible that further changes to the detailed requirements for this area may occur.

The proposals in this paper have been applied to the pre-release of version 5.0.

1.1 Key definitions used in this paper

MiFID-Specific Terms

CA - Competent Authority (Regulator)

CAL – Competent Authority of the most relevant market in terms of liquidity

CATV – Competent Authority of the Transaction (Execution) Venue

Host CA – Competent Authority of the country where the Investment Firm is operating

Home CA – Competent Authority of the country where the Investment Firm is registered or incorporated

MTF – Multi-lateral Trading Facility

RM – Regulated Market

SI – Systematic Internaliser

1.2 Methodology

Approach

This paper is a result of a detailed business analysis of the impact of MiFID and the changes to protocols that will be necessary. The analysis will consider 3 separate dimensions of the post-MiFID world:

1. Process – the business process
2. Participant – who is affected (broker-dealer, RM, buy-side etc)
3. Product – equities, fixed income etc

Gaps

For each process, a capability gap analysis grid will be produced for each relevant message type. Where a message is capable of meeting a requirement but the data standard is lacking, one of two approaches will be taken:

1. If the data standard ‘belongs’ to the protocol ie, a missing enumeration in FIX, then the message will be shown as not meeting the requirement.
2. If the data standard does not belong to the protocol, as is the case with instrument identifiers or other ISO standards, the message will be shown as meeting the requirement but the data standard shortfall will be highlighted and passed on to the Reference Data Subject Group.

¹ See Section 5 – Summary of Proposed Changes to FIX 5.0



Output

The output is a set of business requirements and will propose:

1. The message best suited to meet the requirement.
2. Changes to existing messages.
3. New messages (if required).
4. New fields and enumerations.
5. New business practice. In certain cases, some of the changes proposed in this document such as the future removal of certain fields from the specification and their replacement by enumerations in component blocks may cause problems with existing implementations of FIX. In recognition of the fact that pragmatism has to take precedence, it is proposed to allow users the option of **either** using the new component block elements **or** to continue using existing fields. Business practice guidance will need to be formulated to avoid confusion.

1.3 Assumptions

1. FIX 5.0 will be used.
2. No 'request' messages will be used. MiFID impacts 'push' messages only.
3. No negotiation or bilateral conversations are relevant.
4. Changes to FIX messages will not affect non-MiFID flows.

1.4 Scope

1.5 In Scope

1. Pre-trade transparency.
2. Order handling and trading.
3. Post-trade transparency.
4. Transaction reporting.

1.6 Out of scope

1. Internal processes affected by MiFID.
2. Quote requests. Quote and IOI requests will remain valid messages but are outside the scope of MiFID's pre-trade transparency rules which cover quotation via a 'push' model.
3. Quote response. Following the logic in 2. above, quotes that are generated to meet MiFID requirements will be sent on a 'push' basis and not in response to a request.
4. Determination of whether the Investment Firm is an SI.
5. Interpretation of delayed publication rules (although post-trade transparency messages will need to indicate delayed publication and delayed publication reason).

2. The Level-2 Documentation

The paper is based on the draft Commission Regulation and Directive, both dated 30 Jun 2006 (referred to as the Level-2 documentation). Together these 2 documents comprise the "Implementing Measures" for MiFID Level 1 - Directive 2004/39EC. A Regulation is more prescriptive than a Directive and is intended to be adopted into national governing law by member states without having to go through a transposition process. A Directive allows leeway for individual states to implement legislation that takes account of existing national market practice and legal structures. The 2 quotes below from the background notes to the Implementing Measures give an idea of the distinction between the 2 types.



Directive

“The form of a Directive is necessary in order to enable the implementing provisions to be adjusted to the specificities of the particular market and legal system in each Member State.”

Regulation

“...comprehensive and uniformly applicable provisions are desirable to avoid both divergences in transposition and ‘gold-plating’ by Member States. Furthermore, the provisions of this Regulation are detailed and technical, and as such are capable of direct application, without the need for national transposition, to all investment firms in all Member States.”

2.1 Relevant Articles in the Implementing Measures

The draft Implementing Measures cover all the articles in the Level 1 Directive but this paper only covers those that are directly relevant to standard message protocols.

2.1.1 Directive

Topic	Level 1	Level 2
Best execution	Arts 19(1) and 21(1)	Art 44
Client order handling	Art 22(1)	Art 47

2.1.2 Regulation

Topic	Level 1	Level 2
Pre-trade transparency for RMs and MTFs	Arts 29, 44	Art 16
Pre-trade transparency for SIs	Art 27(1)	Art 23
Execution of orders by SIs	Arts 27 (3 and 6)	Art 24
Post-trade transparency	Arts 28, 30 and 45	Art 26
Provisions common to pre- and post-trade	Arts 27(3), 29(1), 44(1)	Art 28
Transaction reporting	Art 25 (3 and 5)	Arts 12, 13
Obligation to co-operate	Art 56	Art 14
Exchange of information	Art 58	Art 14

3. Changes and Issues

Newly discovered issues and/or changes to this paper from the previous versions (versions 1.6 to 1.8) published on the FPL website are summarised below. These changes have been made in response to: feedback received, actual or proposed changes to the FIX specification, or as a result of changes or clarifications in the MiFID Implementing Measures.

Note: “Table 1” is shown in Section 11.7 of this paper.

Change from previous version/New issue	Impact on FIX
Order messages must allow clients to specify the number of shares on unfilled limit orders that should be shown to the market.. It is proposed to use new tag 1138 DisplayQty instead of tag 210	Nil



Change from previous version/New issue	Impact on FIX
<p>MaxShow. The order originator has the option of further refining their instructions on how an order should be displayed by using new fields 1091 PreTradeAnonymity and 1092 PriceProtectionScope.</p>	
<p>The MiFID reporting template can be used for both trade reporting and transaction reporting. Add new enumerations to identify post trade reports as:</p> <ul style="list-style-type: none"> • Trade report only • Transaction report only • Trade report and transaction report <p>New enumerations will be added to field 1123 TrdHandlInstr and should be used in conjunction with field 852 PublishTrdIndicator. Guidance on new business practice to follow</p>	New enumerations, new business practice
<p>According to the Level 2 text, In post-trade transparency messages and transaction reports, time is required to be shown as local time together with an offset from GMT (UTC).² The proposed new TZTime data type will be based on ISO 8601 with a UTC offset. Format is HH:MM[:SS][Z [+ - hh:mm]]] where HH = 00-23 hours, MM = 00-59 minutes, SS = 00-59 seconds, hh = 01-12 offset hours, mm = 00-59 offset minutes. Examples: 1. 07:39Z is 07:39 UTC, 02:39-05 is five hours behind UTC, thus Eastern Time. 2. 20060901-15:39+08 is eight hours ahead of UTC, Hong Kong/Singapore time on 1st of September 2006 3. 20060901-13:09+05:30 is 5.5 hours ahead of UTC, India time on 1st of September 2006</p> <p>Note that the latest CESR call for evidence seems to contradict this approach and now mentions offset from UTC, which is the industry standard.</p>	New data type – TZTime ie Time with time zone offset
<p>The use of the TZTime data type will be limited to those data elements where the Level 2 and 3 documentation specifically requires it. Elsewhere, standard market practice will prevail</p>	Nil
<p>New fields and enumerations to be created to allow more detail to be published in trade- and transaction reports – SecondaryPxType. Field will be used to show why reported price differs from current market value and to indicate the existence of special bargain conditions.</p>	New field in TradeCaptureReport (MsgType=AE)
<p>New enumerations are proposed for field 828 TrdType and 829 TrdSubType to allow more detailed post-trade reporting in line with existing formats</p>	Small – gap addressed by proposed changes to TradeCaptureReport (MsgType=AE)
<p>Clarified requirement to add “published” as a status in the TradeCaptureReportAck message. Aim is to reduce unnecessary message traffic.</p>	Minor – MsgType=AR
<p>Auction clearing price and auction clearing volume. Clarified use of enumerations to existing tags, creation of new tags. Clarified business practice. The proposal in this document to add the Parties block to market data messages is already in the draft 5.0 spec.</p>	Minor
<p>Proposal to create new field RptSys to show system on which report has been published has been dropped</p>	Nil

² Only those time fields specifically required by the Regulation to be expressed as an offset from UTC will be modified by being expressed in TZTime format. Elsewhere, FIX will continue to observe standard market practice by using UTC.



Change from previous version/New issue	Impact on FIX
Quote and Mass Quote messages. Proposal to allow use of these messages to meet MiFID pre-trade transparency requirements has been dropped. Only Market Data messages should be used for this role.	Nil

4. Summary of Recommendations

4.1 Pre-trade

Quotes should be disseminated using one of the following FIX 5.0 message types:

1. Market Data Snapshot Full Refresh (MsgType=W)
2. Market Data Incremental Refresh (MsgType=X)

Only the Market Data message types, Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X), will be used as a means of meeting MiFID pre-trade transparency requirements. Quote and MassQuote messages may not be used for this role.

4.1.1 Recommended Amendments

1. Create new enumerations in the *Parties* block and, where necessary, the *NestedParties* block to allow for MiFID entity types and entity roles.
2. Add the *Parties* block to the Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X) message types in place of existing quote originator fields. Note: this is already part of the FX Gap Analysis and is present in the draft 5.0 spec.
3. Create new fields to allow time to be stated as an offset from UTC.

4.2 Order Handling

1. Add new enumerations to clarify best-execution requirements
2. Allow a wider range of identifier types to indicate an execution venue

4.3 Post-trade Transparency

The requirements relating to the content of post-trade reports so far outlined in the draft Level 2 documentation fall far short of the complexity and richness of content of existing trade reporting formats used by exchanges. How and if this will be addressed either at the final Level 2 stage or via national legislation at Level 3 is unclear. The Trade Capture Report (MsgType= AE) message will need minor modifications as will the *Parties* component block:

1. Create new *PartyRole* enumeration in *Parties* block to identify report initiator.
2. Use the new “role” enumerations created in *Parties* and *NestedParties* blocks to identify report initiator role and execution venue – these will be used in addition to the existing *PartyRole* enumerations: executing system (6) and exchange (22).
3. Create fields and enumerations that give allow greater precision in reporting in order to identify reports where the price differs from the market price at the time of the report, to give reasons for this difference and to allow use of additional detail fields.



4. Create new fields based on the new TZTime data type to allow time to be stated as an offset from UTC.

The content of post-trade transparency reports proposed by MiFID is much more simple and rudimentary than existing exchange-specific formats and it is for this reason that additional enumerations are proposed that will allow users to express the necessary level of detail in their reports when using FIX messages.

4.4 Transaction Reporting

The only reportable transaction in scope for MiFID is the sale of a financial instrument (Financing trades, the exercise of options or covered warrants and primary market transactions etc are excluded). The Trade Capture Report Message meets all the requirements laid out in the Level 2 text. However, given that the same report template is to be used for both post-trade transparency reporting and transaction reporting, this creates a number of issues:

1. When transaction reporting via an exchange, there is currently no way for the recipient to tell whether the message is a trade report, a transaction report or both. Additional enumerations are proposed to deal with this issue.
2. The reporting template is very basic, and given that CAs may impose additional transaction reporting requirements over and above those stipulated in the Level 2 text, additional enumerations have been added to allow the reporting of transaction types that are currently reported but fall outside the scope of the Level 2 text.

5. Summary of Proposed Changes to FIX 5.0

Message or component block	Proposed change
Market Data Snapshot Full Refresh (MsgType=W) Market Data Incremental Refresh (MsgType=X)	<p>Add "Auction clearing price enumeration to the existing MDEntryType (269) field.</p> <p>The MDEntryPx (270) field would then be used to display this price. See note in the 5.0 spec for details of when this field is conditionally required.</p> <p>Add "Potential volume at auction clearing price" enumeration to the existing MDEntryType (269) field</p> <p>The MDEntrySize (271) field would then be used to show the number of shares potentially tradeable at the auction clearing price. (need to note as conditionally required under above condition in msg table field usage comment)</p> <p>Deprecate (remove from future versions) the following fields³:</p> <ul style="list-style-type: none"> • MDEntryOriginator (282) • LocationID (283) • DeskID (284) • MDMkt (275) <p>Add Parties block. The parties block will carry, <i>inter alia</i>, the information previously shown in fields 282-284 above. See <i>Parties</i> block below.</p> <p>Add existing fields NoRoutingIDs (215), RoutingType (216) and RoutingID (217)</p>
<Parties> component block	Allow use of G=MIC in the PartyIDSource (447) field as

³ Although deprecation is recommended, see point 5 of the "Output" paragraph in section 1.2 above for a suggested interim approach to allow the co-existence of new component block enumerations and existing tags.



Message or component block	Proposed change
	<p>identifier for Quote originator and Execution venue</p> <p>Add the following enumerations to the PartyRole (452) field:</p> <ul style="list-style-type: none"> • Quote originator • Report originator • Systematic Internaliser (SI) • Multilateral Trading Facility (MTF) • Regulated Market (RM) • Market Maker • Investment Firm • Host Competent Authority (Host CA) • Home Competent Authority (Home CA) • Competent Authority of the most relevant market in terms of liquidity (CAL) • Competent Authority of the Transaction (Execution) Venue (CATV) (or field 803) <p>Add the following enumerations to the PartySubIDType (803) field:</p> <ul style="list-style-type: none"> • Market-maker, (both to PartyRole and PartySubIDType?) • Eligible counterparty • Professional client • Location • Execution Venue (or use field 452)
<p>New Order Single (MsgType=D) New Order List (MsgType=E)</p>	<p>Add new "Best Execution" enumeration to the HandlInst (21) field. For trades under MiFID, this additional enumeration would be used to avoid any ambiguity created by using 21=3 Manual order, best execution</p> <p>Change the format of the ExDestination (100) field to allow the use of multiple identifier types (IBEI, BIC etc) Add new field "ExDestinationIDSource" Allow following enumerations to ExDestinationIDSource Existing:</p> <ul style="list-style-type: none"> • B – BIC • C – AccptMarketPart • D – PropCode • E – ISOCODE • G – MIC <p>New</p> <ul style="list-style-type: none"> • IBEI
<p>Trade Capture Report (MsgType=AE)</p>	<p>Create new Boolean field, "ReportedPxDiff" to show that reported price differs from market price. Values: "Yes", "No". Add new business practice: use either:</p> <ol style="list-style-type: none"> 1. Field 828 – PriceType <p>or</p> <ol style="list-style-type: none"> 2. New field – SecondaryPxType (see below) <p>to give reason for price difference</p> <p>Create new field "SecondaryPxType" This will be used to improve granularity of trade reporting and/or to show the reason that reported price differs from market price. Add enumerations to the new field (Existing LSE field values are shown where relevant)</p> <ol style="list-style-type: none"> 1. Error trade 2. Negotiated trade 3. VWAP=VW 4. Special cum dividend = CD 5. Special ex dividend = XD 6. Special cum coupon = CC



Message or component block	Proposed change
	<p>7. Special ex coupon = XC 8. Cash settlement = CS 9. Special price (usually net- or all-in price) = SP 10. Guaranteed delivery = GD 11. Special cum rights = CR 12. Special ex rights = XR 13. Special cum capital repayments = CP 14. Special ex capital repayments = XP 15. Special cum bonus = CB 16. Special ex bonus = XB 17. Block trade (same as large trade) 18. Worked principal trade (UK-specific)</p> <p>For completeness, these enumerations should be added to all those messages where field 423 (Price Type) is specified</p>
	<p>Add enumerations to field 828 TrdType to handle additional trade and transaction reporting fields</p> <ul style="list-style-type: none"> • Block Trades – after market • Name change • Portfolio transfer • Prorogation buy – Euronext Paris only. Is used to defer settlement under French SRD (deferred settlement system) . Trades must be reported as crosses at zero price • Prorogation sell - see prorogation buy • Option exercise • Delta neutral transaction • Financing transaction (includes repo and stock lending) • AI - automated input facility disabled in response to an Exchange request. • B - transaction between two member firms where neither member firm is registered as a market maker in the security in question and neither is a designated fund manager. Also used by broker dealers when dealing with another broker which is not a member firm. Non-order book securities only. • K - transaction using block trade facility. • LC - correction submitted more than three days after publication of the original trade report. • M - transaction, other than a transaction resulting from a stock swap or stock switch, between two market makers registered in that security including IDB or a public display system trades. Non-order book securities only. • N - non-protected portfolio transaction or a fully disclosed portfolio transaction • NM <ul style="list-style-type: none"> (i) transaction where Exchange has granted permission for non-publication (ii) IDB is reporting as seller (iii) submitting a transaction report to the Exchange, where the transaction report is not also a trade report. • NR - non-risk transaction in a SEATS security other than an AIM security • P - protected portfolio transaction or a worked principal agreement to effect a portfolio transaction which includes order book securities



Message or component block	Proposed change
	<ul style="list-style-type: none"> • PA - protected transaction notification • PC - contra trade for transaction which took place on a previous day and which was automatically executed on the Exchange trading system • PN - worked principal notification for a portfolio transaction which includes order book securities • R <ul style="list-style-type: none"> (i) riskless principal transaction between non-members where the buying and selling transactions are executed at different prices or on different terms (requires a trade report with trade type indicator R for each transaction) (ii) market maker is reporting all the legs of a riskless principal transaction where the buying and selling transactions are executed at different prices (requires a trade report with trade type indicator R for each transaction)or (iii) market maker is reporting the onward leg of a riskless principal transaction where the legs are executed at different prices, and another market maker has submitted a trade report using trade type indicator M for the first leg (this requires a single trade report with trade type indicator R). • RO - transaction which resulted from the exercise of a traditional option or a stock-settled covered warrant • RT - risk transaction in a SEATS security, (excluding AIM security) reported by a market maker registered in that security • SW - transactions resulting from stock swap or a stock switch (one report is required for each line of stock) • T - if reporting a single protected transaction • WN - worked principal notification for a single order book security • WT - worked principal transaction (other than a portfolio transaction) <p>Note: abbreviations relate to existing LSE reporting codes Business Practice. For all trade and transaction reporting, important to populate tag 852 PublishTrdIndicator to show whether the report should be sent to trade reporting system.</p> <p>Add new enumerations to field 1123 TrdHandlInstr to show what type of message is being sent:</p> <ol style="list-style-type: none"> 1. Trade Report 2. Transaction Report 3. Trade Report AND Transaction Report <p>Add new field based on TZTime data type: TZTransactTime</p>
Trade Capture Report Ack (MsgType=AR)	<ol style="list-style-type: none"> 1. Create market practice that allows data aggregators to show that trade reports have been published without generating excessive message traffic. 2. Enumeration "trade confirm" in field 1123 TrdHandlInstr will be used to denote onward publication.

6. High-level Requirements

Chosen protocols must meet these requirements:



1. Support multiple products.
2. Messages can be easily consolidated.
3. Minimum change to existing messages.
4. Bandwidth, compressibility.
5. Minimal translation across the business flow - Quote, Order, Execution Report, Trade Report, Transaction Report.
6. Support the requirements of RMs, MTFs and Investment Firms.
7. Identify the instrument being quoted with sufficient granularity to avoid problems in such areas as: settlement venue, settlement currency, fungibility, taxation.
8. Clarify rules for handling those cases where an entity is playing multiple roles.

7. Pre-Trade Transparency

All Articles refer to the Level 1 documentation except where explicitly stated otherwise.

7.1 MiFID Articles

Directive Element	Level 1 Reference	Level 2 Reference
Pre-trade transparency for Investment Firms	Art 27(8,b,i), Recital 24	Reg Arts 23, 24
Pre-trade transparency for MTFs	Art 29	Reg Art 28
Pre-trade transparency for RMs	Art 44	Reg Art 16

Key requirements

1. RMs and MTFs operating a continuous order book have an obligation to show the aggregated number of orders for each share at each price level for at least the 5 best bid and offer price levels for each share.
2. Quote-driven markets must show continuous 2-way (exceptionally 1-way) quotes for all market-makers.
3. Markets operating a periodic auction order book have an obligation to show the price for each share that would best satisfy the trading algorithm and the potential number or shares executable at this price.
4. Hybrid markets (order book with market-maker support) must '*maintain a standard of pre-trade transparency that ensures adequate information as to the level of orders or quotes and of trading interest in that share at any particular time is made publicly available*⁴.'

7.2 Participants Affected

1. Investment firms
2. RMs
3. MTFs

7.3 Products Affected

1. Liquid shares admitted to trading on an RM:
 - a. Ordinary shares/common stock
 - b. Preference shares
 - c. ADRs
 - d. GDRs
 - e. Rights issues

⁴ Working Document ESC/20/2005 – rev 3, Article 3, para 5



f. ETFs

7.4 Quote Models under MiFID

1. Market-maker support. MMs send quote/mass quotes to exchanges which consolidate these into their market data. MMs may use quote status request messages to check on status.
2. MiFID concentrator model. Same as 1 using quote or market data messages with third-party acting as concentrator.
3. Virtual market. Quote or market data messages sent by SI, RM, MTF: consolidation done by receivers.
4. SIs may choose whom to give access to their quotes (Article 27, para 5).

7.4.1 Quote Process - FIX Message Options

Quote messages

Quote (MsgType=S)

Mass Quote (MsgType=i)

Market Data messages

Market Data Snapshot Full Refresh (MsgType=W)

Market Data Incremental Refresh (MsgType=X)

Which Messages to use?

The FIX 5.0 specification gives some guidance over whether to use quote or market data messages:

Referring to tradable quotes, the specification states

The market created by these quotes should be distributed using the Market Data messages....

...The quote should not be used in tradable and restricted tradable quoting markets, such as electronic trading systems, to broadcast quotes to market participants. The recommended approach to reporting market state changes that result from quotes received by a market is to use the market data messages.⁵

Market Data messages allow top of book (best bid and offer), full book (5 best quotes for example), aggregated and non-aggregated prices (MarketDepth (264) field).

FIX Quote messages do not support the “single instrument, multiple quote sources” model. FIX Market Data messages do support such a model. Although exchanges currently consolidate market-maker Quote messages and translate them into their own proprietary format, to minimise the translation overhead, it is recommended that FIX Market Data messages be used.

8. Business Requirements

8.1.1 Participant

1. Support order-driven markets operating a continuous auction order book

⁵ FIX 4.4 Specification, Volume 3



2. Support order-driven markets operating a periodic auction order book (auction clearing price, likely volume)
3. Support quote-driven markets
4. Support hybrid markets (order book with market-maker support)

8.1.2 Product

1. Supports global equities
2. Supports other products or can be adapted to fit
3. Identify the instrument being quoted with sufficient granularity to avoid problems in such areas as: settlement venue, settlement currency, fungibility, taxation.

8.1.3 Process

1. Show five price levels on bid and offer
2. Show multiple quote sources for the same instrument or
3. Identify the quote originator.
4. Identify the quote originator **role** (RM, SI, MTF, investment firm)
5. Supply supplementary information about the quote originator (Acting as market maker, desk, location)
6. Identify the execution venue (the quote originator may be a disclosed market-maker, SI or investment firm; the execution venue may be an RM or MTF)
7. Disclose market depth.
8. To meet MiFID requirements, quotes must be tradable, firm, 2-way and not indicative.
9. Support selective routing and blocking of quotes to certain clients.

8.2 Capability Gaps

Y= yes, the requirement is fully met

N=the requirement is not met

P=the requirement is partially met

Requirement	Quote	Mass Quote	MD Full	MD Increment
Support continuous order book	Y	Y	Y	Y
Support periodic auction order book	N	N	N	N
Support quote-driven markets	Y	Y	Y	Y
Support hybrid markets	Y	Y	Y	Y
Show 5 price levels on bid and offer	N ⁰	N ⁰	Y	Y
Show multiple quote sources	N	N	N	N
Identify quote originator	Y	Y	P ¹	P ¹
Identify quote originator role	N	N	N	N
Supply supplementary information about the quote originator	Y	Y	P	P
Identify execution venue	P ²	P ²	P ¹	P ¹
Disclose market depth	N	N	Y	Y
Flag quotes as tradable	Y	Y	Y	Y
Support routing and blocking	N	N	N	N
Show time as offset from UTC	N	N	N	N

Notes



0. If 5 separate price levels are to be shown, Market Data Snapshot Full Refresh (MsgType=W) or Market Data Incremental Refresh (MsgType=X) should be used.
1. Existing fields MDEntryOriginator (282), LocationID (283) and DeskID (284) give partial coverage, but it is proposed to deprecate (remove from future versions of FIX) these fields and move them to the *Parties* or *NestedParties* component blocks. If this creates too big a development overhead for existing implementations then a possible solution is to allow users a choice of using **either** the existing fields **or** the *Parties* block.
 2. The ExDestination (100) field could be used, but for consistency, a new enumeration in the *Parties* block is proposed. Once again, it may be easier to leave the existing field in place and allow users the option to continue using it rather than switching to the *Parties* block.

8.2.1 Requirements to Meet Gaps

Key Business Requirement	
1.	Support periodic auction order book model to allow auction clearing price and projected traded size at that price.
Detailed Description	
1.1	Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X) : add "Auction clearing price " enumeration to the MDEntryType (269) field. The MDEntryPx (270) field would then be used to display this price
1.2	Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X): add "Potential volume at auction clearing price " enumeration to the MDEntryType (269) field. The MDEntrySize (271) field would then be used to show the number of shares potentially tradeable at the auction clearing price
Notes	
New business practice for Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X) : if 269="Auction Clearing Price" then 270 must be populated with this price.	

Key Business Requirement	
2.	Identify quote originator entity in Market Data Messages
Detailed Description	
2.1	Add Parties block to Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X) messages. Note – this requirement has already been met in the draft 5.0 spec
2.2	In Parties block add "Quote originator " enumeration to the PartyRole (452) field.
2.3	Allow use of G=MIC in the PartyIDSource (447) field as identifier for Quote originator and Execution venue
2.4	Deprecate (remove from future versions) the following fields from the Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X) messages: <ul style="list-style-type: none"> • MDEntryOriginator (282) • LocationID (283) • DeskID (284) • MDMkt (275) But see 2.5 below
2.5	Business practices. If removal of fields creates too high an impact on existing implementations, allow users the choice of using either the existing fields shown in 2.4 OR the <i>Parties</i> block but not both.
Notes:	

Key Business Requirement	
3	Identify quote originator entity role (RM, SI, MTF, investment firm)
Detailed Description	



3.1	In Parties block add the following enumerations to PartyRole (452): <ol style="list-style-type: none"> 1. Quote originator 2. Report originator 3. SI (Systematic Internaliser) 4. MTF (Multilateral Trading Facility) 5. RM (Regulated Market) 6. MM (Market Maker) 7. IF (Investment Firm) 8. CAHS (Host Competent Authority) 9. CAHM (Home Competent Authority) 10. CAL (Competent Authority of the most relevant market in terms of liquidity) 11. CATV (Competent Authority of the Transaction (Execution) Venue)
Notes	
The inclusion of CA enumerators is to make the party role usable for transaction reporting. Clearly, CAs will not send or receive pre-trade transparency messages.	

Key Business Requirement	
4.	Supply supplementary information about the quote originator
Detailed Description	
4.1	In the Parties block add following enumerations to the PartySubIDType(803) field: <ol style="list-style-type: none"> 1. Market-maker 2. Eligible counterparty 3. Professional client 4. Location (Desk is already enumerated in field 803) 5. Execution venue (this can be stated at Party- or SubParty level)
Notes	

Key Business Requirement	
5.	Identify execution venue (RM, MTF, OTC)
Detailed Description	
5.1	In Parties block add "Execution venue" enumeration to the PartyRole (452) field. (16=Executing system or 22=Exchange can still be used)
5.2	In Parties block add "Execution venue" enumeration to the PartySubIDType (803) field
Notes	

Key Business Requirement	
6	Identify MiFID participant type
Detailed Description	
6.1	Add the following enumerations to PartySubIDType (803) and NestedPartySubIDType (805) fields: <ol style="list-style-type: none"> 1. SI (Systematic Internaliser) 2. MTF (Multilateral Trading Facility) 3. RM (Regulated Market) 4. MM (Market Maker) 5. IF (Investment Firm) 6. CAHS (Host Competent Authority) 7. CAHM (Home Competent Authority) 8. CAL (Competent Authority of the most relevant market in terms of liquidity) 9. CATV (Competent Authority of the Transaction (Execution) Venue) 10. Desk 11. Location



Notes

Key Business Requirement	
7	Support routing and blocking of quotes
Detailed Description	
7.1	Follow the existing logic used for routing and blocking IOIs – see 4.4 Spec, volume 3, Appendix 3A
7.2	Add the existing NoRoutingIDs (215), RoutingType (216) and RoutingID (217) fields to Quote (MsgType=S), MassQuote (MsgType=i), Market Data Snapshot Full Refresh (MsgType=W) and Market Data Incremental Refresh (MsgType=X) messages.
Notes	

9. Order Handling

9.1 MiFID Articles

Directive Element	Level 1 Reference	Level 2 Reference
Best execution	Art 21	Dir Art 44
Client order handling	Art 22(2,3)	Dir Art 47, Reg Art 24

Key requirements

1. Identify the originator of the order and determine whether the originator is acting in the role of eligible counterparty or client.
2. Capture changes in role between client and eligible counterparty on a trade-by-trade basis if supplied on the order.
3. Capture client instructions for displaying the unfilled portion of limit orders on a trade-by-trade basis.
4. Capture client instructions relating to best execution on a trade-by-trade basis.
5. Capture client instructions relating to whether or not the order may be executed outside an MTF or RM.

9.2 Participants Affected

1. Investment firms

9.3 Products Affected

1. Liquid shares admitted to trading on an RM:
 - a. Ordinary shares/common stock
 - b. Preference shares
 - c. ADRs
 - d. GDRs
 - e. Rights issues
 - f. ETFs



9.4 Order Handling under MiFID

1. Orders sent to RMs and MTFs will be handled subject to the rules of the market, whereas there is more flexibility concerning orders sent to Investment Firms.
2. List orders comprising less than 10 stocks are subject to best execution rules.
3. The unfilled portion of limit orders in liquid stocks must be made publicly available.

9.4.1 Order Process - FIX Message Options

New Order Single (MsgType=D)

New Order List (MsgType=E)

Out of scope

New Order Cross (MsgType=s)

New Order Multileg (MsgType=AB)

List Execute (MsgType=L)

9.5 Business Requirements

9.5.1 Participant

1. Support requirements for Investment Firms

9.5.2 Product

1. Supports global equities

9.5.3 Process

1. Identify order originator
2. Identify order originator role on trade-by-trade basis
3. Capture part-fill handling instructions on trade-by-trade basis
4. Capture best-execution requirements on trade-by-trade basis
5. Capture execution venue instructions on trade-by-trade basis
6. Support list trading

9.6 Capability Gaps

Y= yes, the requirement is fully met

N=the requirement is not met

P=the requirement is partially met

Requirement	New Order Single	New Order List
Identify order originator	Y	Y
Identify order originator role	P ¹	P ¹
Capture order originator capacity	P ¹	P ¹
Capture part-fill handling instructions on trade-by-trade basis	Y	Y
Capture best-execution requirements on trade-by-trade basis	P	P
Capture execution venue instructions on trade-by-trade basis	N	N
Support list trading	-	Y

Notes:



1. The changes proposed to enumerations in the *Parties* block for pre-trade transparency will meet the requirements to identify the role of the order originator

9.6.1 Requirements to Meet Gaps

Key Business Requirement	
1	Capture part-fill handling instructions on trade-by –trade basis
Detailed Description	
1.1	Use DisplayQty (1138) field to show the quantity of part-filled orders that should be shown to the market
Notes	

Key Business Requirement	
2	Capture best-execution requirements on a trade-by trade basis
Detailed Description	
2.1	Add new “Best Execution” enumeration to the HandlInst (21) field. For trades under MiFID, this additional enumeration would be used to avoid any ambiguity created by using the HandlInst (21) enumeration “3 = Manual order, best execution”
Notes	
The requirement to capture best-execution requirements on a trade-by-trade basis may not be technically feasible for many firm’s systems and may not be part of the Level 3 text	

Key Business Requirement	
3	Capture execution venue instructions on a trade-by-trade basis
Detailed Description	
3.1	Allow multiple identifiers (IBEI, BIC etc) as valid formats in the ExDestination (100) field
Notes	

10. Post-trade Transparency

10.1 MiFID Articles

Directive Element	Level 1 Reference	Level 2 Reference
Post-trade disclosure by Investment Firms	Article 28	Reg Art 26
Post-trade transparency requirements for MTFs	Article 30	Reg Art 26
Post-trade transparency requirements for RMs	Article 45	Reg Art 26

Key requirements

1. Identify the originator of the post-trade transparency report and its role.
2. Identify trade details at aggregated or trade level.
3. Handle reporting rules.



4. Show time as offset from UTC.
5. Capture onward publication details

10.2 Participants Affected

1. Investment firms
2. RMs
3. MTFs

10.3 Products Affected

1. Liquid shares admitted to trading on an RM:
 - a. Ordinary shares/common stock
 - b. Preference shares
 - c. ADRs
 - d. GDRs
 - e. Rights issues
 - f. ETFs

10.4 Post-trade Transparency under MiFID

1. Orders sent to RMs and MTFs will be handled subject to the rules of the exchange

10.4.1 Post-trade Transparency - FIX Message Options

- Trade Capture Report (MsgType=AE)
- Trade Capture Report Ack (MsgType=AR)

10.5 Business Requirements

10.5.1 Participant

1. Messages must meet the requirements of:
 - i. Investment Firms
 - ii. MTFs
 - iii. RMs

10.5.2 Product

1. Supports global equities

10.5.3 Process

1. Identify report originator
2. Identify report originator role
3. Identify report originator capacity – agent, principal, riskless principal
4. Provide details of the trade on aggregated or trade-level basis⁶
 - i. Execution venue
 - ii. Instrument
 - iii. Trading day
 - iv. Trading time stated as local time plus an offset from UTC.
 - v. Price per share
 - vi. Where applicable that the exchange of share is determined by factors other than the current market valuation of the share
 - vii. Indication that the trade was a negotiated trade, if applicable

⁶ ESC 20/2005 rev 3, Article 12



- viii. Amendments to previously disclosed information
- 5. Where the transaction is executed outside the rules of a RM or MTF, the report shall be submitted by an Investment Firm, either by mutual agreement between the trading parties or by the first one of the following that applies:
 - i. The selling Investment Firm
 - ii. The Investment Firm acting for the seller
 - iii. The Investment Firm acting for the buyer
 - iv. The buying Investment Firm
- 6. Identify delayed reports.
- 7. Show additional price and transaction type information.
- 8. Allow reporting of transaction types outside the scope of MiFID level 2.
- 9. Identify whether the report is a post-trade transparency report, a transaction report or both
- 10. Show whether the report should be published or not.

10.6 Capability Gaps

Y= yes, the requirement is fully met

N=the requirement is not met

P=the requirement is partially met

Requirement	Trade Capture Report
Identify report originator	N
Identify report originator role	N ¹
Identify report originator capacity	Y
Show execution venue	N ²
Identify instrument	Y
Report trading day	Y
Show transaction time as offset from UTC	N
Report price	Y
Improve granularity of price type reporting	N
Allow reporting of additional transaction types	N
Amend reports	Y
Identify delayed reports	Y
Identify report type (transparency report, transaction report)	N

Notes:

- 1. See pre-trade transparency section for details of party roles.
- 2. See pre-trade transparency section for details of new enumerations for execution venue.

10.6.1 Requirements to Meet Gaps

Key Business Requirement	
1.	Identify post-trade report initiator
Detailed Description	
1.1	In Parties block add "Report originator" enumeration to the PartyRole (452) field.
1.2	Allow use of G=MIC in the PartyIDSource (447) field as identifier for report originator and Execution venue
Notes:	



Key Business Requirement	
2	<p>Improve granularity of price type reporting and therefore:</p> <ol style="list-style-type: none"> 1. Indicate that reported price differs from market price 2. Show why reported price differs from market price 3. Display additional trade/transaction conditions 4. Display additional trade/transaction types
Detailed Description	
2.1	Create new Boolean field, "ReportedPxDiff" in Trade Capture Report (MsgType=AE) message to show that reported price differs from market price. Values: "Yes", "No"
2.2	Create new field, "SecondaryPxType" to improve granularity of reporting and, where applicable, to show why price differs from current market price and to report additional trade conditions
2.3	<p>Create enumerations for SecondaryPxType as follows:</p> <ol style="list-style-type: none"> 1. Error trade 2. Negotiated trade 3. VWAP=VW 4. Special cum dividend = CD 5. Special ex dividend = XD 6. Special cum coupon = CC 7. Special ex coupon = XC 8. Cash settlement = CS 9. Special price (usually net- or all-in price) = SP 10. Guaranteed delivery = GD 11. Special cum rights = CR 12. Special ex rights = XR 13. Special cum capital repayments = CP 14. Special ex capital repayments = XP 15. Special cum bonus = CB 16. Special ex bonus = XB 17. Block trade (same as large trade) 18. Worked principal trade (UK-specific) <p>Note: abbreviations relate to existing LSE codes</p>



2.4	<p>Add enumerations to field 828 TrdType to handle additional trade and transaction reporting fields Some of these need to be split out into 829 TrdSubType</p> <p>Eg Add periodic or summary reports to 828 and add stuff like prorogation trades or SI summary reports in 829</p> <ul style="list-style-type: none"> • Block Trades – after market • Name change • Portfolio transfer • Prorogation buy – Euronext Paris only. Is used to defer settlement under French SRD (deferred settlement system) . Trades must be reported as crosses at zero price • Prorogation sell - see prorogation buy • Option exercise • Delta neutral transaction • Financing transaction (includes repo and stock lending) • AI - automated input facility disabled in response to an Exchange request. • B - transaction between two member firms where neither member firm is registered as a market maker in the security in question and neither is a designated fund manager. Also used by broker dealers when dealing with another broker which is not a member firm. Non-order book securities only. • K - transaction using block trade facility. • LC - correction submitted more than three days after publication of the original trade report. • M - transaction, other than a transaction resulting from a stock swap or stock switch, between two market makers registered in that security including IDB or a public display system trades. Non-order book securities only. • N - non-protected portfolio transaction or a fully disclosed portfolio transaction • NM <ul style="list-style-type: none"> (i) transaction where Exchange has granted permission for non-publication (ii) IDB is reporting as seller (iii) submitting a transaction report to the Exchange, where the transaction report is not also a trade report. • NR - non-risk transaction in a SEATS security other than an AIM security • P - protected portfolio transaction or a worked principal agreement to effect a portfolio transaction which includes order book securities • PA - protected transaction notification • PC - contra trade for transaction which took place on a previous day and which was automatically executed on the Exchange trading system • PN - worked principal notification for a portfolio transaction which includes order book securities • R <ul style="list-style-type: none"> (i) riskless principal transaction between non-members where the buying and selling transactions are executed at different prices or on different terms (requires a trade report with trade type indicator R for each transaction) (ii) market maker is reporting all the legs of a riskless principal transaction where the buying and selling transactions are executed at different prices (requires a trade report with trade type indicator R for each transaction)or (iii) market maker is reporting the onward leg of a riskless principal transaction where the legs are executed at different prices, and another market maker has submitted a trade report using trade type indicator M for the first leg (this requires a single trade report with trade type indicator R). • RO - transaction which resulted from the exercise of a traditional option or a stock-settled covered warrant • RT - risk transaction in a SEATS security, (excluding AIM security) reported by a market maker registered in that security • SW - transactions resulting from stock swap or a stock switch (one report is required for each line of stock) • T - if reporting a single protected transaction • WN - worked principal notification for a single order book security • WT - worked principal transaction (other than a portfolio transaction) <p style="text-align: center;">© FIX Protocol Limited 2006</p> <p>Note: abbreviations relate to existing LSE reporting codes</p>
-----	---



	Notes

Key Business Requirement	
3	Show transaction time as offset from UTC
Detailed Description	
3.1	Use new field based on TZTime data type: "TZTransactTime"
Notes	
Will also be used for transaction reporting	

Key Business Requirement	
4	Show details of report publication – Trade Capture Report Ack (MsgType=AR) message
Detailed Description	
4.1	Use enumeration "Trade Confirmation" to the TrdHandInstr (1123) field to show that the trade has been published.
4.2	Publish new business practice. If the choice is between delaying the sending of the Trade Capture Report Ack while waiting for details of onward publication or sending it in a timely fashion but with the publication confirmation data missing, then the latter should take precedence. Under no circumstances should more than 1 Ack be sent for the same message merely to supply additional publication data.
Notes	
Will also be used for transaction reporting	

Key Business Requirement	
5.	Mark report for publication
Detailed Description	
5.1	Use field 852 PublishTradeIndicator to flag report for publication/non-publication
Notes:	

Key Business Requirement	
6.	Identify Report Type
Detailed Description	
6.1	Add new enumerations to field 1123 TrdHandInstr to show what type of message is being sent: 1. Trade Report 2. Transaction Report 3. Trade Report AND Transaction Report
Notes:	



11. Transaction Reporting

11.1 MiFID Articles

Directive Element	Level 1 Reference	Level 2 Reference
Obligation to report transactions	Article 25	Reg Arts 12, 13
Obligation to co-operate	Article 56	Reg Art 14
Exchange of information	Article 58	Reg Art 14

Key requirements

1. Identify the originator of the transaction report and its role.
2. Comply with the data content and format for transaction reporting.
3. Ensure that the report can be routed to the correct final destination.
4. Show transaction time as offset from UTC

11.2 Participants Affected

1. Investment firms
2. RMs
3. MTFs
4. CAs

11.3 Products Affected

Transaction reporting under MiFID covers all instruments that come under the Directive and not just shares.

11.4 Transaction Reporting under MiFID

1. After much deliberation, the draft Level 2 text has proposed that the sole reportable transaction shall be the sale of a financial instrument.
2. Investment firms transacting in shares admitted to trading on an RM must report transactions (including OTC transactions) to the host CA no later than the close of the next working day.
3. Two proposed models for communication between CAs have been proposed.
 - a. The host CA will then send the report to: 1. The CA of the trading venue (now known as the Execution Venue) CATV, 2. To the CA of the most relevant market in terms of liquidity (CAL) and to the home CA of the Investment Firm. Clearly, the home CA may also play the role of CATV, home CA and/or CAL.
 - b. The CA receiving the transaction report places it in a database to which the other relevant CAs will have access.
4. The draft Regulation makes no mention of the very detailed work done by CESR's TTF as outlined in CESR/05-398b published in June 2005. For this reason, the decision has been taken to limit the analysis of the proposed content and methodology outlined by CESR rather than go into field-by-field detail.
5. Instead of adopting the ISO standard of using GMT (UTC) for transaction reporting, the Commission has seen fit to require the use of local time of the competent authority to which the transaction will be reported, expressed as an offset from UTC. If this proposal goes ahead, the use of fields based on the TZTime data type will allow FIX to accommodate it.
6. Because the post-trade transparency report and the transaction report share the same reporting template, the new fields and enumerations required for transaction reporting are shown in the previous section and not duplicated here.



Transaction Reporting - FIX Message Options

Trade Capture Report (MsgType=AE)

11.5 Business Requirements

11.5.1 Participant

1. Messages must meet the requirements of:
 - i. Investment Firms
 - ii. MTFs
 - iii. RMs
 - iv. CAs

11.5.2 Product

This list is taken from Working Document ESC/7/2005 rev 4 and does not seem to have been modified by the Implementing Measures.

1. Shares
2. Bonds or other forms of securitised debt
3. Money-market instruments
4. UCITs
5. Derivatives of which the underlying is a share
6. Derivatives of which the underlying is a bond or other forms of securitised debt
7. Derivatives of which the underlying is a commodity
8. Derivatives of which the underlying is an index
9. Derivatives of which the underlying is an interest rate
10. Others (the identity of these "other" products is not specified in the draft Level 2 Implementing Measures)

11.5.3 Process

1. Identify report originator
2. Identify report originator role
3. Identify report originator capacity
4. Identify CA
5. Identify CA role
6. Carry the data content proposed by Working Document ESC/7/2005 rev 4

11.6 Capability Gaps

Y= yes, the requirement is fully met

N=the requirement is not met

P=the requirement is partially met

Requirement	Trade Capture Report
Identify report originator	N ¹
Identify report originator role	N ²
Identify report originator capacity	Y
Identify CA	N ³
Identify CA role	N ³
Identify transaction time as an offset from UTC	N ⁴
Show details of report publication	N ⁵

Notes:



1. See pre-trade transparency section for details of party roles.
2. Ditto.
3. See pre-trade transparency section for details of new Parties and Roles.
4. See post-trade transparency section for details of handling time offsets.
5. See post-trade transparency section for details on report publication.

11.7 Proposed Reporting Fields

This table is taken from Annex 1 to the draft Implementing Regulation and is little changed from the proposals set out in ESC/7/2005 rev 4. It has a number of significant issues which are set out below.

11.7.1 Table 1: List of fields for reporting purposes

Field Identifier	Description	Trade Capture Report
1. Reporting Firm Identification	A unique code to identify the firm which executed the transaction.	Y
2. Trading Day	The trading day on which the transaction was executed.	Y
3. Trading Time	The time at which the transaction was executed, reported in the local time of the competent authority to which the transaction will be reported and the time zone in which the transaction was executed expressed as GMT +/- hours.	N
4. Buy/Sell Indicator	Defines whether the transaction was a buy or sell from the perspective of the reporting investment firm or, in the case of a report to a client, of the client.	Y
5. Trading Capacity	Identifies whether the firm executed the transaction on its own account (either on its own behalf or on behalf of a client) or for the account and on behalf of a client.	Y
6. Instrument Identification	This should consist of: - a unique code, to be decided by the competent authority to which the report is made identifying the financial instrument which is the subject of the transaction; - if the financial instrument in question does not have a unique identification code, the report must include the name of the instrument or, in the case of a derivative contract, the characteristics of the contract.	Y
7. Instrument Security Code Type	The code type used to report the security code of the instrument	Y
8. Underlying Instrument Identification	Instrument identification applicable to the security that is the underlying asset in a derivative contract as well as the transferable security included under article 4, (1), 18.c) of Directive 2004/39/EC.	Y
9. Underlying Instrument Identification Code type	The code type used to report the underlying security code of the instrument	Y
10. Instrument Type	The classification of the financial instrument	Y



Field Identifier	Description	Trade Capture Report
	<p>that is the subject of the transaction. The description must at least indicate whether the instrument belongs to one of the following categories:</p> <ul style="list-style-type: none"> • Shares • Bonds or other forms of securitized debt • Money Market Instruments • Units in collective investment undertakings • Derivatives of which the underlying is a share • Derivatives of which the underlying is a bond or other forms of securitised debt • Derivatives of which the underlying is a commodity • Derivatives of which the underlying is an index • Derivatives of which the underlying is an interest rate • Other financial instruments 	
11. Maturity Date	The maturity date of a bond or other form of securitized debt, or the exercise date /maturity date of a derivative contract.	Y
12. Derivative Type	Specification whether a derivative is an option, future, swap, forward rate agreement or any other derivative contract.	Y
13. Put/Call	Specification whether an option or any other financial instrument is a put or a call.	Y
14. Strike Price	The strike price of an option or other financial instrument.	Y
15. Price Multiplier	The number of units of the financial instrument in question which are contained in a trading lot; for example, the number of derivatives or securities represented by one contract.	Y
16. Unit Price	The price per security or derivative contract excluding commission and accrued interest. In the case of a debt instrument, the price may be expressed either in terms of currency or as a percentage.	Y
17. Price Notation	The currency in which the price is expressed. If, in the case of a bond or other form of securitised debt, the price is expressed as a percentage, that percentage shall be included.	Y
18. Quantity	The number of units of the financial instruments, the nominal value of bonds, or the number of derivative contracts included in the transaction.	Y
19. Quantity Notation	An indication whether the quantity is the number of units of financial instruments, the nominal value of bonds or the number of derivative contracts.	Y
20. Counterparty	<p>Identification of the counterparty to the transaction. That identification shall consist of:</p> <ul style="list-style-type: none"> – where the counterparty is an investment 	Y



Field Identifier	Description	Trade Capture Report
	<p>firm, a unique code for that firm, to be determined by the competent authority (if any) to which the report is made;</p> <ul style="list-style-type: none"> – where the counterparty is a regulated market or MTF or an entity acting as its central counterparty, the unique harmonised identification code for that market, MTF or entity acting as central counterparty, as specified in the list published by the competent authority of the home Member State of that entity in accordance with Article 12(2); – where the counterparty is not an investment firm, a regulated market, an MTF or an entity acting as central counterparty, it should be identified as ‘customer/client’ of the investment firm which executed the transaction. 	
21. Venue Identification	<p>Identification of the venue where the transaction was executed. That identification shall consist of:</p> <ul style="list-style-type: none"> - where the trading venue is a regulated market or MTF, its unique harmonized identification code; - otherwise: the code ‘OTC’. 	Y
22. Transaction Reference Number	A unique identification number for the transaction provided by the investment firm or a third party reporting on its behalf	Y
23. Cancellation Flag	An indication as to whether the transaction was cancelled.	Y

11.7.2 Issues with Table 1

The table above contains insufficient data fields for its intended roles in post-trade transparency and transaction reporting.

1. Article 12 of the Regulation allows for CAs to require unspecified additional information on transaction reports. The changes proposed to the FIX spec to allow for these changes take the form of new fields, for example, SecondaryPxType, to which new enumerations can be added once national and market-specific requirements become clear.
2. CAs may also require reports to show the identities of underlying clients. This is covered to an extent by field 20 above but the key omission is some notion of “counterparty role”.
3. Also absent is a field to indicate that exchange of shares was determined by factors other than current market valuation.
4. The ability to reference previous reports that are to be replaced or modified by the current report is absent from Table 1.
5. Comparing Table 1 with existing exchange formats for trade reporting (Post-trade transparency reporting) shows that it contains too few fields to be a realistic contender to replace existing formats. This is recognised in paragraph 2.2 to the Regulation Background Note.
6. Table 1 has no field for Net Consideration or any details of the amounts making up this figure. FIX 4.4 already has the necessary fields.



11.7.3 Table 2: Further details for use by Competent Authorities

Field Identifier	Description	Trade Capture Report
1. Reporting Firm Identification	In addition to the information specified in Table 1, the full name of the reporting firm.	Y
6. Instrument Identification	The unique code, agreed between all the competent authorities, applicable to the financial instrument in question shall be used.	Y
20. Counterparty	Where the counterparty is an investment firm, instead of the information specified in Table 1, the full name of the investment firm.	Y

12. Parties block in FIX 4.4 and 5.0

This table is included in order to show the way in which FIX uses Party hierarchies in its various component blocks.

	Party Field Name			Nested Party Field Name			Settlement Party Field Name	
453	NoPartyIDs		539	NoNestedPartyIDs		781	NoSettlPartyIDs	
→	448	PartyID	→	524	NestedPartyID	→	782	SettlPartyID
→	447	PartyIDSource	→	525	NestedPartyIDSource	→	783	SettlPartyIDSource
→	452	PartyRole	→	538	NestedPartyRole	→	784	SettlPartyRole
→	802 NoPartySubIDs		→	804 NoNestedPartySubIDs		→	801 NoSettlPartySubIDs	
→	→	523 PartySubID	→	→	545 NestedPartySubID	→	→	785 SettlPartySubID
→	→	803 PartySubIDType	→	→	805 NestedPartySubIDType	→	→	786 SettlPartySubIDType



13. MiFID Changes Summary

Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
1132	TZTransactTime	Add new	TZTimestamp	represents the transact time in the local date-time stamp with a TZ offset to UTC identified		TradeCaptureReport
1133	ExDestinationIDSource	Add new	char	identifies the ID source of ExDestination Add enums B - BIC C – AccptMarketPart D – PropCode E – ISOCODE G - MIC		New Order Single New Order List OrderCancelReplaceRequest Quote NewOrderCross CrossOrder CancelReplace Request New Order Multileg MultilegOrder CancelReplaceRequest QuoteStatusReport QuoteResponse



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
1134	ReportedPxDiff	Add new	Boolean	Shows that the reported price that is different from the market price Update usage description in message tables to state that the reason(s) for the price difference should be stated by using field 828 TrdType and, if required, field 829 TrdSubType as well		TradeCaptureReport



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
828	TrdType	Update	int	Add new enums <ul style="list-style-type: none"> • Error trade • Special cum dividend = CD • Special ex dividend = XD • Special cum coupon = CC • Special ex coupon = XC • Cash settlement = CS • Special price (usually net- or all-in price) = SP • Guaranteed delivery = GD • Special cum rights = CR • Special ex rights = XR • Special cum capital repayments = CP • Special ex capital repayments = XP • Special cum bonus = CB 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • Special ex bonus = XB • Block trade (same as large trade) • Worked principal trade (UK-specific) • Block Trades – after market • Name change • Portfolio transfer • Prorogation buy – Euronext Paris only. Is used to defer settlement under French SRD (deferred settlement system) . Trades must be reported as crosses at zero price • Prorogation sell - see prorogation buy • Option exercise • Delta neutral transaction 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> Financing transaction (includes repo and stock lending) 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
829	TrdSubType	Update	int	<p>Add new enums</p> <ul style="list-style-type: none"> • AI - automated input facility disabled in response to an Exchange request. • B - transaction between two member firms where neither member firm is registered as a market maker in the security in question and neither is a designated fund manager. Also used by broker dealers when dealing with another broker which is not a member firm. Non-order book securities only. 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • K - transaction using block trade facility. • LC - correction submitted more than three days after publication of the original trade report. • M - transaction, other than a transaction resulting from a stock swap or stock switch, between two market makers registered in that security including IDB or a public display system trades. Non-order book securities only. 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • N - non-protected portfolio transaction or a fully disclosed portfolio transaction • NM <ul style="list-style-type: none"> i) transaction where Exchange has granted permission for non-publication ii) IDB is reporting as seller iii) submitting a transaction report to the Exchange, where the transaction report is not also a trade report. • NR - non-risk transaction in a SEATS security other than an AIM security 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • P - protected portfolio transaction or a worked principal agreement to effect a portfolio transaction which includes order book securities • PA - protected transaction notification • PC - contra trade for transaction which took place on a previous day and which was automatically executed on the Exchange trading system • PN - worked principal notification for a portfolio transaction which includes order book securities 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • R <ul style="list-style-type: none"> (i) riskless principal transaction between non-members where the buying and selling transactions are executed at different prices or on different terms (requires a trade report with trade type indicator R for each transaction) (ii) market maker is reporting all the legs of a riskless principal transaction where the buying and selling transactions are executed at different prices (requires a trade report with trade type indicator R for each transaction) <p>or</p>		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				(iii) market maker is reporting the onward leg of a riskless principal transaction where the legs are executed at different prices, and another market maker has submitted a trade report using trade type indicator M for the first leg (this requires a single trade report with trade type indicator R).		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • RO - transaction which resulted from the exercise of a traditional option or a stock-settled covered warrant • RT - risk transaction in a SEATS security, (excluding AIM security) reported by a market maker registered in that security • SW - transactions resulting from stock swap or a stock switch (one report is required for each line of stock) • T - if reporting a single protected transaction 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • WN - worked principal notification for a single order book security • WT - worked principal transaction (other than a portfolio transaction) 		
18	ExecInst	Update	MultipleCharValue	Add new enum: <ul style="list-style-type: none"> • Best Execution 		
269	MDEntryType	Update		Add new enum: <ul style="list-style-type: none"> • Auction clearing price 		
270	MDEntryPx	Update		Update usage description in message tables to state MDEntryPx is conditionally required when MDEntryType = "auction clearing price"		MarketDataSnapshotFullRefresh MarketDataIncrementalRefresh



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
271	MDEntrySize	Update		Update usage description in message tables to state MDEntrySize is conditionally required when MDEntryType = "auction clearing price"		MarketDataSnapshotFullRefresh MarketDataIncrementalRefresh



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
452	PartyRole	Update		Add new enums for: <ul style="list-style-type: none"> • Quote originator • Report originator • Systematic internaliser (SI) • Multilateral Trading Facility (MTF) • Regulated Market (RM) • Market Maker • Investment Firm • Host Competent Authority (Host CA) • Home Competent Authority (Home CA) • Competent Authority of the most relevant market in terms of liquidity • (CAL)Competent Authority of the Transaction (Execution) Venue (CATV) 		



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
				<ul style="list-style-type: none"> • Reporting intermediary (medium/vendor via which report has been published) • Execution Venue • Market data entry originator • Location ID • Desk ID 		
803	PartySubIDType	Update		Add new enums: <ul style="list-style-type: none"> • Market maker • Eligible counterparty • Professional client • Location • Execution Venue 		
RoutingGrp	RoutingGrp Component Block	Add		Add NoRoutingIDs repeating group		MarketDataSnapshotFullRefresh MarketDataIncrementalRefresh
282	MDEntryOriginator	Deprecate				MarketDataSnapshotFullRefresh MarketDataIncrementalRefresh
283	LocationID	Deprecate				MarketDataSnapshotFullRefresh MarketDataIncrementalRefresh
284	DeskID	Deprecate				MarketDataSnapshotFullRefresh MarketDataIncrementalRefresh



Tag	Field Name	Action	Data type	Field Description	FIXML Abbreviation	Add to / Deprecate From Message Type or Component Block
285	MDMkt	Deprecate				MarketDataSnapshotFullRefresh MarketDataIncrementalRefresh