

COMMITTEE OF EUROPEAN SECURITIES REGULATORS

Date: 10 June 2009 Ref.: CESR/09-355

REPORT

Impact of MiFID on equity secondary markets functioning



Table of Contents

	Introduction	
2	Current trends since MiFID came into force	4
	2.1 Trading	
	2.1.1 The emerging post-MiFID landscape of trading venues	4
	2.1.2 Regulated markets: initiatives taken in response to MiFID and changes in	trading
	environment	8
	2.1.3 Multilateral Trading Facilities	11
	2.1.4 Systematic Internalisers	15
	2.2 Emerging post MiFID landscape: impact on trading costs and sustainability	of this
	development	17
	2.3 Emerging post-MiFID landscape: equity market data	19
	2.3.1 MiFID framework	19
	2.3.2 Market developments	20
	2.4 Emerging post-MiFID landscape: post-trading services	
	2.4.1 MiFID framework	
	2.4.2 Market developments	
3.	Pre-trade transparency issues	
	3.1 MiFID pre-trade transparency regime: purpose and general obligations	
	3.1.1 MiFID framework	
	3.1.2 Market developments	
	3.2 Issues surrounding the MiFID pre-trade transparency regime	
	3.2.1 Pre-trade transparency waivers	
	3.2.2 Systematic internaliser regime	
	3.2.3 Internal matching by investment firms ('crossing systems')	
	3.3 Policy considerations	
	3.3.1 Price formation and overall market quality	
	3.3.2 Execution of orders	
	3.3.3 Level playing field	
	3.4 Conclusions and next steps	
4.	Post-trade transparency issues	
	4.1 Calibration of the MiFID transparency regime	
	4.2 Quality of MiFID data	
	4.2.1 Quality of MiFID post-trade transparency data	
	4.2.2 Quality of the CESR MiFID database	
	4.3 Cost of data	
	4.4 Consolidation of data	
	4.5 Policy considerations	
	4.6 Conclusions and next steps	
5.	Remaining barriers to a pan-European level playing field across trading venues	
	5.1 Supervision	
	5.2 Differing regulatory regimes	
	5.3 Post-trading services (clearing and settlement)	
	5.4 Policy considerations	
_	5.5 Conclusions and next steps	
	Impact of fragmentation on supervision	
	Objectives of MiFID	
8.	Summary of recommendations and conclusions	34



Executive Summary

In the beginning of November 2008, marking the first anniversary of the implementation of MiFID, CESR launched the work to analyse the impact of the Markets in Financial Instruments Directive (MiFID) on secondary markets functioning concentrating on shares admitted to trading on regulated markets. This report makes a statement of findings on European equity markets and recommends further work to address issues that are identified.

When considering the impact of MiFID, it is important to bear in mind that other factors have had a significant impact on equity trading, including unprecedented market volatility and the defaults of major counterparties. In addition, many of the changes are still working their way through the system and it may be premature to draw more than provisional conclusions at this stage. Nonetheless, it is possible to identify trends in the market and areas where further work may be required.

The introduction of MiFID has significantly changed the secondary markets landscape across Europe. Established exchanges have seen their positions challenged and the most significant change to the trading landscape has been the impact of new Multilateral Trading Facility (MTF) platforms. A key reason for this is that new trading platforms offer more opportunities for pan-European trading because of the range of shares offered by the venues and their very competitive fees. Whilst the market share of regulated markets has decreased since the implementation of MiFID, the vast majority of equity trading remains on the incumbent regulated markets rather than new entrants and Over-the-Counter (OTC).

Many factors have influenced the cost of trading since MiFID came into force. Competition between trading venues has resulted in downward pressures on direct execution costs. At the same time, increase in technology spent to trade in a more fragmented environment and general widening of bid-offer spreads as a result of volatile market conditions have tended to offset the reduction in trading fees. It has also been suggested that fee reductions by trading platforms have not been passed by trading participants to investors.

Trade transparency is important for price formation, the efficient functioning of the markets, the fulfilment of best execution and the mitigation of the potential adverse impact of market fragmentation. Concerns have been expressed over a number of pre-trade transparency issues ranging from interpretation issues to potentially undesirable impacts on innovation and unlevel playing field between various trade execution venues. CESR is already taking steps to address these concerns. For instance, a process for considering future applications for waivers has been implemented and CESR has agreed to undertake a review of all pre-trade transparency waivers starting in the latter half of this year.

MiFID introduced competition in trade publication services by giving investment firms choice in where they publish their transparency information. Data is now available from a number of different sources. Fragmentation of transparency information, if not addressed properly, raises concerns because it could undermine the overarching transparency objective in MiFID. Concerns have been expressed about the effect of market data fragmentation; in particular there is a need for better quality of post-trade data and a consolidated set of market data. In addition to the work which is already underway within CESR to bring greater clarity to the post-trade transparency obligations, it is recognised that further work needs to be done within CESR to better understand and assess issues surrounding the calibration of the deferred publication regime, the cost of accessing post-trade data and the consolidation of data.

There are also issues which need to be addressed to ensure there is a pan-European level playing field. MiFID is aimed at developing competition and greater efficiency of equity trading while maintaining investor protection. This greater competition is raising concerns among trading platforms, by regulated markets vis-à-vis MTFs, and by regulated markets and MTFs vis-à-vis



investment firms' OTC activities. Beyond the commercial interests underpinning the concerns expressed, it is important to be and remain aware of the challenges raised by the still recent introduction of the MiFID framework governing competition in equity trading so that action can be taken or recommendations made to address issues identified.

1. Introduction

- 1. The Markets in Financial Instruments Directive (MiFID), a major part of the European Union's Financial Services Action Plan (FSAP), came into effect on 1 November 2007. It introduced significant changes to the European regulatory framework, taking account of developments in financial services and markets since the Investment Services Directive (ISD), which it replaced, was implemented in 1995.
- 2. In the beginning of November 2008, CESR launched the work to analyse the impact of MiFID on secondary markets functioning concentrating during the first stage on shares admitted to trading on regulated markets. The purpose of this report is to make a statement of findings on European equity markets. This report may provide input for CESR's future advice to the European Commission for the Article 65 review of MiFID. The preparation of a second report on the impact of MiFID on European non-equity markets has been started in parallel with the finalisation of this report.
- 3. The analysis contained in this report is focused on the functioning of the MiFID provisions and the related provisions of the MiFID Implementing Regulation in the following areas market transparency and integrity, regulated markets, Multilateral Trading Facilities (MTFs) and systematic internalisers (SIs).¹
- 4. In conducting the review, CESR has published a Call for Evidence and held aroundtable to seek views on the workings of MiFID and its impact. Thirty-nine submissions (including four confidential submissions) and three confidential annexes were received in response to the Call for Evidence from a range of European trade associations, regulated markets, MTFs, data vendors, an investment bank and other interested parties (Annex 2 provides a list of non-confidential responses to the Call for Evidence). The roundtable attracted a broad range of participants from the market and promoted debate on the key issues. Different market participants have differing views on the impact of MiFID depending on their position in the market and the nature of their interests. It is important to bear in mind that MiFID is not only about benefits for market participants. The key question is whether the overall market has benefited.
- 5. The report is organised as follows. Section 2 describes key developments since MiFID came into force, focusing in particular on the impact on market structure and competition. Section 3 discusses the emergence of so-called 'dark pools' of liquidity and, more generally, the pre-trade transparency landscape post-MiFID and what impact this may have on price formation, market efficiency and level playing field. Section 4 assesses the impact of MiFID on post-trade data quality and consolidation. Section 5 reviews outstanding barriers to a level playing field. Section 6 highlights potential implications of fragmentation for supervision. Section 7 reviews whether MiFID policy objectives have been met. Section 8 summarises all issues and respective recommendations to CESR Chairs made throughout the report.

2. Current trends since MiFID came into force

2.1 Trading

2.1.1 The emerging post-MiFID landscape of trading venues

6. The introduction of MiFID has significantly changed the secondary markets landscape across Europe. In principle, a trade can now be executed in all national markets either on an

¹ The analysis will not explicitly deal with transaction reporting as an evaluation of CESR's guidelines on what execution of a transaction is in the context of transaction reporting is being conducted as a separate review.



organised market (a regulated market or MTF), or by an investment firm either acting as an SI or executing trades OTC. In practice, the venue used to execute a trade will depend on where the share is admitted to trading and a number of other factors such as liquidity, certainty of execution, and costs.

- 7. When considering the impact of MiFID, it is important to bear in mind other drivers that have had an impact on the trading services market. The market has faced unprecedented volatility over the past 12 months and dealt with defaults of major counterparties.
- 8. Established exchanges have seen their positions challenged and the most significant change to the trading landscape has been the impact of new MTF platforms. These new entrants have had the effect of moving trading away from regulated markets, as well as of attracting new liquidity from the OTC space. MTFs have steadily increased their market share of trading in all markets. This growth has occurred in parallel with the launch of new MTF platforms. A key reason for this is that new trading platforms offer more opportunities for pan-European trading because of the range of shares offered by the venues and their very competitive fees.
- 9. However, it is important to note that while the market share of regulated markets has decreased since the implementation of MiFID, the majority of trading remains on the incumbent regulated markets rather than new entrants and OTC. There is limited competition between regulated markets due to the fact that regulated markets generally offer trading in shares admitted to trading on their own regulated market rather than pan-European trading of shares admitted to trading on other regulated markets in the EU, although some regulated markets operate MTFs that offer pan-European share trading and in this way compete with regulated markets (e.g., all German regulated markets traditionally operate MTFs ('Freiverkehr') where also a lot of shares listed on markets in other countries can be traded². A recent example is NASDAQ OMX Stockholm which has started trading in Norwegian shares listed on Oslo Bors³.
- Market share of OTC trading has continually fluctuated since the implementation of MiFID with a slight upward trend.

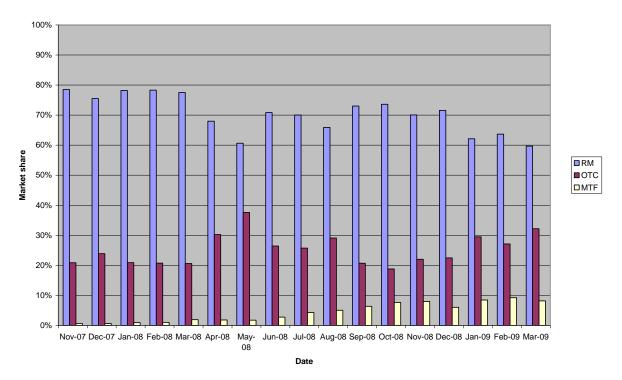
² For example, trading of shares included in the 'Freiverkehr' operated by Deutsche Boerse can be done via the

with 100 European blue chips in the last guarter of 2009.

electronic trading system ('Xetra') or via the 'Skontrofuehrer' on the floor. ³ Deutsche Boerse also plans to launch a new pan-European segment ("Xetra International Market") starting



Graph 1: Market share in all EU shares by turnover (Data in this graph should be taken as indicative of overall trends as it may not reflect a consistent and accurate allocation of trades as OTC/regulated market trades in some markets)



Source: Thomson Reuters Market Share Reports

Table 1: Main European markets ranked by value of equity trading (March 2009)

	Exchanges/MTFs	Volume of shares traded (millions)	Turnover (€ billions)
1	LSE Group	76,658	238.1
2	$\mathrm{Euronext}^4$	10,304	125.4
3	Deutsche Boerse	5,314	97.2
4	Spanish Markets	8,303	56.4
5	Chi-X	8,818	54.8
6	SWX Europe	2,273	54.2
7	Nasdaq OMX Nordic	8,179	45.8
8	Turquoise	3,161	22.6
9	Oslo Bors	3,659	12.0
10	BATS Europe	1,408	7.9

Source: Thomson Reuters Market Share Reports

11. It is interesting to note that there are now two MTFs (Chi-X and Turquoise) within the eight largest European equity markets. While Chi-X is at the upper end of the mid-sized markets, it is still not in a position to compete with individual European regulated markets as these still attract a large part of the liquidity in the shares traded on their platforms.

⁴ The value of equity trading on Euronext is underestimated because the Thomson Reuters data does not include the opening and closing auction trading volume on Euronext.



12. In general, trends in national markets mirror the overall trends in all EU shares. Trading in the majority of national markets now occurs on regulated markets, MTFs and OTC. However, the landscape of trading venues varies between national markets and some markets have experienced more change than others. The trend that the market share of new MTFs has increased seems to be more pronounced for UK shares, Euronext shares and German shares, and less so in the Italian and Nordic markets so far. This may be linked to the fact that the new MTFs tend to cover only the most liquid EU shares.

Impact on trades

13. One of the main developments has been a significant decrease in hit sizes, coupled with an increase in the number of trades. This is likely to be due to a combination of different factors, including an increase in the level of algorithmic trading, market fragmentation and market volatility, rather than simply the implementation of MiFID. Whilst it had started before MiFID, the decline in hit sizes has been more pronounced since MiFID came into force. As discussed it is not clear that this decline was caused solely by MiFID.

Table 2: London Stock Exchange order book

Year	Order Book Average Size	Order Book Number of Trades	Value Traded (£ billion)
2008	10,094	186,495,999	1,883
2007	14,912	133,982,906	1,998
2006	19,362	78,246,367	1,515
2005	20,463	51,415,546	1,052
2004	21,472	40,771,163	875
2003	21,739	32,897,427	715

 $Source: London\ Stock\ Exchange. - \underline{www.londonstockexchange.com}\ Factsheets\ and\ News.$



Graph 2: Average hit size on Euronext

All members - Average hit size - Euronext



2.1.2 Regulated markets: initiatives taken in response to MiFID and changes in trading environment

MiFID framework

14. MiFID elaborates on the concept of regulated markets introduced by the Investment Services Directive (ISD) and defines a regulated market as 'a multilateral system, operated and/or managed by a market operator, which brings together multiple third-party buying and selling interests in financial instruments.' MiFID requires operators of regulated markets to have transparent and non-discretionary rules and procedures that provide for fair and orderly trading. It aims to ensure this by, among other things, placing requirements on operators of regulated markets regarding how they organise their markets and the information they give users and potential users, including detailed transparency requirements in respect of trading in shares that are admitted to trading on a regulated market. The option given by the ISD to Member States to introduce a so-called "concentration rule" requiring the execution of transactions on regulated markets was abolished in the MiFID framework in order to allow for competition between trading venues.

Market developments

- 15. Prior to the introduction of MiFID, all domestic regulated markets in Europe enjoyed a very strong position in the trading of shares admitted to trading on their markets. It was sometimes argued that this was a result of the "concentration rule" but it is worth noting that the same quasi monopoly situation could be found in some Member States that did not formally implement the ISD concentration rule but had tax or other provisions to the same effect that were removed post MIFID.
- 16. In the lead up to MiFID, and post-MiFID, regulated markets put in place a range of initiatives aiming at anticipating and adapting to the increasingly competitive environment expected from, and actually faced, with the implementation of MiFID in the area of equity trading. Some of these initiatives would have taken place regardless of the implementation of MiFID, as part of a response to more globalised, electronic and competitive markets worldwide. However,



others may be considered as part of a more specific response to the changing environment under MiFID.

- 17. Pre-MiFID, at the time they were still benefiting from a de facto or de jure monopoly, some European regulated markets opted for strategic business moves in order to be better positioned to face the evolving environment. Consolidation or mergers between regulated markets, be it at an European level, such as the LSE/Borsa Italiana deal, or with a cross Atlantic dimension (NYSE/Euronext, NASDAQ/OMX) were triggered, among other things, by the search for a critical mass, in terms of trading volumes and clients, and for economies of scale, including in IT. This consolidation trend across regulated markets seems to continue post-MiFID. The latest example is the acquisition by the Vienna Stock Exchange of a large majority stake in the Prague Stock Exchange in November 2008, following the acquisition of a majority stake in the Ljubljana Stock Exchange in June 2008. The Vienna Stock Exchange is also a majority shareholder in the Budapest Stock Exchange. Strategic moves also included less dramatic or demanding options, such as partnerships and cooperation agreements with international exchanges.
- 18. From a more directly operational perspective, many regulated markets took initiatives aimed at better responding to the needs of their members and clients. Those initiatives focussed on technological developments, reduction of fees and introduction of new services, either within their traditional core business or extending beyond.
- 19. Regulated markets or their operators, such as Bolsas y Mercados Espanoles (BME), Euronext, NASDAQ OMX Nordic, the LSE or Deutsche Boerse made significant investments to improve their trading technology with the aims of reducing latency, increasing capacity and improving connectivity as those were typically assessed as the key drivers taken into consideration by traders when selecting a trading venue. Those major IT enhancements took place either around MiFID implementation (LSE) or more recently (Universal Trading Platform developed by Euronext)⁵.
- 20. In addition to technology enhancements which might have taken place anyway, regulated markets introduced changes/innovations to their trading models that can be analysed as a more direct and immediate answer to the MiFID environment. Interestingly, it would seem that on the lead to MiFID, regulated markets might have anticipated SIs to be their main competition in a MiFID environment. The internal matching facility developed by Euronext early 2008 aimed at offering its members the possibility to optimise the execution of their orders against their own client/own account orders in the central order book. In May 2007, Deutsche Boerse released Xetra Best which enables Xetra participants to provide their customers with a complete execution of their orders at a reliable price improvement compared to the Xetra order book. The LSE introduced a market making scheme designed to encourage liquidity at great sizes and tighter spreads in both order and quote driven trading.
- 21. It would however seem that, since MiFID implementation, the main competitors to regulated markets have tended to be MTFs rather than SIs⁶ and regulated markets adjusted to this development in the course of 2008. This is due to the launch of a significant number of new MTF platforms providing pan-European trading.
- 22. Some regulated markets have introduced trading in more than two decimals, which had proved attractive to arbitragers and proprietary trading on other platforms. In April 2008, Euronext and Deutsche Boerse launched trading in three decimals for the most liquid shares, and in May 2009, the BME launched trading in up to four decimals⁷.
- 23. New, and often more complex, order types have been introduced. Also, "dark" orders or orders with a dark component which are based on MiFID pre-trade transparency waivers have been

-

⁵ Since Deutsche Boerse has operated an electronic trading platform with remote membership for a long time, its improvements in technology to reduce latency are rather general upgrades to the system than a result of the changing competitive environment post-MiFID.

⁶ Crossing networks are discussed in paragraph 91.

⁷ Interestingly, those developments took place in Europe shortly after Regulation NMS in the US prohibited sub-penny pricing.



introduced. Dark orders and dark pool trading facilities are explained and discussed in greater detail in Section 3 of this report.

- 24. It should be noted that most regulated markets have extended the delays for publication of large in scale trades to the maximum delays allowed by the MiFID Implementing Regulation.
- 25. Although regulated markets initiated fee reductions prior to MiFID, competitive pressure from new MTFs charging significantly lower fees has led, and IT developments have permitted, incumbent exchanges to further move in that direction over the last twelve months. Some of them recently offered new "fee packages" especially aimed at members with significant trading volume, acknowledging the key role of algorithmic trading in providing liquidity to the market. As an example, NASDAQ OMX Nordic has decreased fees by 20% on average since January 2008 (noting that, depending on the trading patterns of each member, this fee reduction may vary). Other regulated markets (e.g. Euronext) reconsidered their fee structure on the basis of order execution rather than on the number of partial fills to execute a single order. The revised fee structure aims to take into account the significant lowering of hit size at all regulated markets over the past few months.
- 26. In response to competition, and in order to try and diversify their sources of revenues, regulated markets have also been expanding the range of services provided, either as part of the regulated market activity⁸, or as a separate activity. For example, Euronext launched its dark pool trading platform (Smartpool) for large size transactions early February 2009 under the MTF umbrella, jointly with three market participants. The LSE is also in the process of launching a new MTF (Project Baikal). Some regulated markets, including NASDAQ OMX Nordic and Euronext, have decided to launch MTFs on which market participants can trade shares not admitted to trading on the parent regulated market, but on other regulated markets.
- 27. To address latency concerns, in addition to the enhancements of their own trading platforms, some regulated markets have, or are about to develop a 'sponsored access', whereby trading members/participants can under certain circumstances allow their clients to have direct technical connectivity to the regulated markets' order books in the name of the trading member/participant to enable them to have faster access to the orderbook. 'Co-location', whereby members and/or clients can rent a space, install their own trading computer physically very close to the regulated market's central matching engine and therefore save some additional nano-seconds in the overall completion of a transaction is also part of the new services now offered by the main European regulated markets. These ways of trying to reduce latency are aimed at attracting algorithmic trading.
- 28. Finally, regulated markets or their operators have expanded their services beyond the trading area. For example, the LSE, Euronext, Deutsche Boerse, NASDAQ OMX Nordic and the BME offer a pan-European trade reporting service for OTC trades. Some regulated markets or their operators (e.g., LSE, Euronext and Deutsche Boerse) provide for best execution services which provide information on execution on other trading venues and transaction cost analysis.
- 29. Eighteen months after the introduction of MiFID, it is important to note that, while the market shares of regulated markets have decreased since the implementation of MiFID, the majority of trading remains in the incumbent regulated markets (see section 2.1). While faced with severe competition from MTFs, regulated markets have remained predominant in terms of volume of trading and price discovery function. In this regard, it is worth noting that in September 2008, where the LSE closed for technical reasons, trading did not switch to MTFs, as one might have anticipated. One of the reasons put forward is that regulated markets still play a key role in, and are strongly relied upon for, price discovery and that market participants are somewhat reluctant to trade absent such reference prices.

⁸ For example, Deutsche Boerse's Xetra MidPoint offers a crossing facility at the mid-price of the Xetra order book under a pre-trade transparency waiver.



30. It is worth noting that regulated markets do not compete directly with each other for secondary trading, but may do so through the establishment of their own MTF (e.g., NYSE Arca Europe, NASDAQ OMX Europe and Freiverkehr at the German exchanges).

Key issues

31. In light of the increased competitive environment, regulated markets expressed concerns in response to the Call for Evidence and during the roundtable that they are faced with an unlevel playing field. While the MiFID provisions governing regulated markets and MTFs are almost similar, regulated markets are concerned that they are subject to more stringent – and costly – regulatory requirements than their MTF competitors. Concerns were also expressed that broker crossing networks were able to operate without pre-trade transparency obligations. These issues are discussed in Section 3 of this report.

2.1.3 Multilateral Trading Facilities

MiFID framework

- 32. MiFID introduced the concept of Multilateral Trading Facilities (MTFs) to replace Alternative Trading Systems (ATSs) that had been established prior to the implementation of MiFID but were not subject to specific EU legislation (although CESR had developed standards for ATSs). An MTF is a system which brings together multiple third-party buying and selling interests in financial instruments in a system and in accordance with non-discretionary rules in a way that results in a contract. MTFs can be operated by investment firms or market operators and are subject to broadly the same overarching regulatory requirements as regulated markets (e.g., fair and orderly trading) and the same detailed transparency requirements as regulated markets.
- 33. One new aspect of the regime is that MiFID enables operators of MTFs to passport their services across borders.
- 34. This report refers only to equity MTFs that provide trading facilities for shares admitted to trading on a regulated market. A significant number of MTFs in Europe provide trading facilities for financial instruments other than equities (for example, bond MTFs and energy derivative MTFs) and a small number of MTFs only provide trading facilities for shares not admitted to trading on a regulated market (for example, the London Stock Exchange's AIM platform). These types of MTFs are outside the scope of the report.

Market developments

35. Pre-MiFID a si

35. Pre-MiFID a small number of MTFs provided trading facilities as ATS (for example, ITG Posit, EuroTLX and Chi-X) or an open market operated by a regulated market (e.g., 'Freiverkehr' at the German exchanges'). A significant number of equity MTFs have been launched since the introduction of MiFID.¹⁰ Indeed, the vast majority of the 24 MTFs which currently provide trading facilities for shares admitted to trading on a regulated market were launched after the implementation of MiFID.¹¹ The number of MTFs is likely to grow even further with at least two additional entities having announced plans to establish MTFs.

36. It might be argued that one potential factor for the growth of MTFs is that prior to MiFID implementation the ability for ATSs to operate in some markets was constrained by the discretion Member States had under the ISD to require certain transactions to be executed on a

⁹ The open market (regulated unofficial market) represents the second German market segment regulated by law next to the regulated market. However, in contrast to the regulated market, the open market is not an official market segment, but governed by private law. Besides German shares, mainly international shares, bonds of German and international issuers, certificates and warrants are traded on the open market.

¹⁰ It should be noted that a high number of non-equity MTFs also existed well before the implementation of MiFID.

¹¹ In comparison, most of the nine MTFs currently operated by German regulated markets which also trade shares admitted to trading on a regulated market in Germany or other EEA countries ('Freiverkehr') have a long tradition and existed well before MiFID.



- regulated market (the so-called 'concentration' rule). The possibility to exercise this discretion is now no longer permissible. The ability to passport services across borders could also be attributed to the growth of MTFs.
- 37. It is interesting to note that MTFs have been established by a broad range of operators. Nearly half of the equity MTFs have been launched by established exchanges for example, SmartPool and NYSE Arca Europe (NYSE Euronext), NASDAQ OMX Europe (NASDAQ OMX) and the 'Freiverkehr' at the German regulated markets. The remainder are either US ATS backed MTFs (e.g., BATS, Euro Millenium and Pipeline) or investment firm/bank backed MTFs (e.g., Chi-X and Turquoise).
- 38. Whilst new MTFs have adopted different strategies to attempt to capture order flow, one can detect some common thread in their approaches.
 - i) Pan-European share trading from a single location
- 39. The vast majority of new MTFs, most of which have been established in the UK, offer pan-European share trading. In doing so, MTFs have availed themselves of the new passport for MTF operators provided under MiFID. Unlike regulated markets, which tend to focus on trading in the shares which are admitted to trading on their markets (i.e. mainly domestic), MTFs offer secondary trading in a broad range of European liquid shares (see Table 3 below).
 - ii) Competing with the primary exchange for trading in domestic securities
- 40. There are also examples where the MTFs' focus is the domestic or regional market instead of a pan-European focus. Nordic investment firm backed new entrant Burgundy will offer trading in all securities that are listed on the primary exchanges of NASDAQ OMX Nordic.
 - iii) Significant investment in trading technology
- 41. All new MTFs have invested in fast and reliable technology to attract order flow, particularly from algorithmic trading and statistical arbitrage. A number of MTFs have also begun to offer 'sponsored access', whereby trading members/participants can under certain circumstances allow their clients to have direct technical connectivity to the MTFs' order books in the name of the trading member/participant to enable them to have faster access to the order book.
 - iv) Introduction of new trading functionalities
- 42. All new MTFs operate electronic order books and most of them offer 'lit' order books similar to the limit order books traditionally operated by regulated markets. About half of existing MTFs have introduced 'dark' order books (e.g., for block trades or so-called 'reference price' systems). In other cases, MTFs offer only dark functionalities. It is worth pointing out that MTFs which have been successful at attracting order flow from traditional exchanges have done so through their lit order books. It is also worth noting that MTFs' strategies have been to attract order flow not only from traditional exchanges but also liquidity (e.g. blocks) which has previously traded away from organised public markets. Some also consider that the trading opportunities opened up by their technological capabilities have drawn new liquidity to the marketplace.
 - v) Introduction of the ability to route orders to other markets
- 43. A number of MTF operators are establishing functionalities that are separate from their trading platform to facilitate management of client orders and as a means for managing order flow to their own trading platform. For example, users submitting orders to a MTF could submit an order for routing (i.e., an order sent to the order book, with a flag that it should be routed to an external execution venue if execution does not occur on the order book) or submit an order to be 'arranged' (e.g. a parent order could be split into child orders, with part of the order being sent to the order book and another part of the order to be routed externally).
 - vi) Reduction in trading fees
- 44. MTFs have competed with other trading platforms by offering lower trading fees, with most utilising fee structures that encourage the provision of liquidity.
 - vii) Uniform symbology framework



- 45. Three UK MTFs have recently announced plans to develop a uniform symbology framework for trading European stocks. The aim of the common symbology is to enable European trading participants to easily consolidate market data from any trading venue and more effectively smart route orders.
 - viii) Post-trade (clearing) services provided by new entrants
- 46. Many new MTFs have formed partnership with new entrants in the clearing market to provide post-trade services. For example, NASDAQ OMX Nordic has introduced the Dutch CCP EMCF in its Nordic markets as an alternative and has also bought an ownership stake in EMCF.

Table 3: Equity MTFs (March 2009)12

MTF	Markets covered by the MTF as at 31 March 2009	Launch Date
BATS Trading	11 European market segments	Nov 2008
Baden- Wuertembergische Wertpapierboerse (Freiverkehr)	International and European equities ¹³	$ m pre-MiFID^{14}$
Block Board (Pipeline)	14 European market segments	summer 2009
Boerse Berlin (Freiverkehr)	Mainly international and fewer European equities 15	pre-MiFID
Boerse Hamburg (Freiverkehr)	Mainly European and fewer international equities 16	pre-MiFID
Boerse Hannover (Freiverkehr)	Mainly European and some international equities ¹⁷	pre-MiFID
Boerse Muenchen (Freiverkehr)	Mainly international and fewer European equities 18	pre-MiFID
Burgundy	4 Nordic markets	May/June 2009
Chi-X Europe	13 European market segments	pre-MiFID
Duesseldorfer Boerse (Freiverkehr)	Mainly international and fewer European equities ¹⁹	pre-MiFID

¹² At some of the MTFs listed in table 3, besides equities also other financial instruments can be traded.

13

¹³ Approximately half of the more than 4000 equities traded are European equities (including about 40% German equities).

 $^{^{14}}$ All German equity trading MTFs have existed well before MiFID as trading platforms operated by respective exchange operators. When MiFID was implemented, they were dedicated as MTFs under the new MiFID regime.

 $^{^{15}}$ Approximately 25% of the more than 14000 equities traded are European equities (including German equities).

¹⁶ Approximately 65% of the more than 900 equities traded are European equities (including German).

¹⁷ Almost 90% of the more than 600 equities traded are European equities (including German).

¹⁸ About 30% of the more than 4300 equities traded are European equities (including German).

¹⁹ Approximately 40 % of the nearly 1300 equities traded are European equities (including German).



Duesseldorfer Boerse Quotrix (Freiverkehr	Equities from German market segments (DAX 30, MDAX, SDAX, TecDax), European Market Segments (e.g. EUROSTOXX 50, CAC 40) and other equities	pre-MiFID
Euro Millenium (NYFIX)	10 European market segments	April 2008
EuroTLX	Non-EU equities, EU equities admitted to trading on EU regulated markets and bonds	pre-MiFID
Frankfurter Wertpapierboerse (Freiverkehr)	Mainly international and fewer European equities ²⁰	pre-MiFID
Frankfurter Wertpapierboerse Xetra (Freiverkehr)	See above	pre-MiFID
Instinet BlockMatch	13 European market segments	June 2008
Liquidnet Europe	All European market segments	pre-MiFID
MTF PEX	Portuguese equities	June 2008 ²¹
NASDAQ OMX Europe	12 European market segments	Sept 2008
NYSE ARCA Europe	10 European market segments	March 2009
Plus-Traded Market	UK small & mid caps	pre-MiFID
Posit	Mainly European and some international equities	pre-MiFID
Smartpool	15 European market segments	Feb 2009
Turquoise Services	15 European market segments	Aug 2008

47. Sources: www.nasdaqomxeurope.com

 $\underline{www.plusmarketsgroup.com}$

 $\underline{www.tradeonsmartpool.com}$

www.tradeturquoise.com www.thinkliquidity.com

www.chi-x.com

www.batstrading.co.uk

www.opex.pt

www.quotrix.de

www.eurotlx.com.

www.euronext.com/nysearcaeurope

http://www.burgundy.se

Pipeline European User Guide

Information gathered via FSA's, BaFin's and the Irish Financial Regulator's supervisory activities.

48. As indicated in Table 4, Chi-X, which started trading seven months before MiFID came into force, has by far the most significant share of MTF trading. Turquoise is the second largest in terms of trading volume, followed by BATS and NASDAQ OMX Europe. The fact that trading

 20 Most of the more than 9300 equities traded are international equities (above 80%).

²¹ Even though it is legally possible to trade shares on MTF PEX, trading has not taken place as yet.



is concentrated on a few MTFs should not be surprising considering many MTFs have launched only recently. Those who have been operating longer have had a chance to attract liquidity. However, the situation is changing as new entrants are trying to establish themselves in the market.

Table 4: Market Share of Equity MTFs

	March 2009		
MTF	Turnover (€ billion)	% of total MTF turnover	
Chi-X	54.8	62	
Turquoise	22.6	25	
BATS Europe	7.9	9	
EuroTLX	2.7	3	
Nasdaq OMX Europe	0.5	1	

Source: Thomson Reuters Market Share Reports

Key issues

49. While Chi-X has been able to achieve considerable volume growth over the past two years, it is less clear what the MTF landscape will look like in one or two years' time. Will MTFs as a group be successful at capturing market share from regulated markets and from investment firms trading outside organised public markets? Will all the current MTFs be still operating bearing in mind that some of them have been operating at a loss since they were launched? Will there be some consolidation either across MTFs or across MTFs and regulated markets?

2.1.4 Systematic Internalisers

MiFID framework

50. MiFID recognised that advances in technology have enabled some investment firms with large client bases and high volumes of agency flow to internalise client orders on a large scale. In order to address this change in the market MiFID introduced the concept of 'systematic internalisers' (SIs)^{22.} The MiFID framework surrounding SIs intends to address the risks to market efficiency that may arise due to the nature of the activity of 'systematic internalisation'. Systematically internalising orders is not based on an open order book, through which potential trading interests are disclosed to other users.

51. MiFID introduced a new transparency regime for investment firms acting as SIs in shares. While all firms trading OTC are subject to post-trade transparency requirements, only those acting as SIs are subject to pre-trade transparency obligations in the form of quoting obligations. To ensure retail investors have a market-wide picture of trading opportunities in any share admitted to trading on a regulated market, MiFID obliges SIs to disclose publicly the price at which they are willing to buy such shares from, or sell such shares to, their clients. These pre-trade transparency requirements apply only to systematic internalisation in liquid

 $^{^{22}}$ A 'systematic internaliser is 'an investment firm which, on an organised, frequent and systematic basis, deals on own account by executing client orders outside a regulated market or an MTF.'



- shares, and only in transactions up to specified sizes. In addition, SIs are only required to provide one sided quotes. Firms dealing on own account exclusively in the wholesale markets, and in wholesale market sizes, are not subject to the SI pre-trade transparency obligations.
- 52. There is no obligation in MiFID for investment firms to seek a separate approval from their home Member State competent authority to carry out systematic internalisation. Rather, this authorisation is covered by the authorisation for dealing on own account and for execution of orders on behalf of clients. However, MiFID requires competent authorities to maintain and publish a list of all SIs in shares admitted to trading on a regulated market.²³

Market developments

53. In the lead up to MiFID, there was much speculation about the number of investment firms which would be classified as SIs. To date, only 11 investment firms²⁴ have informed their home Member State competent authority that they carry out systematic internalisation. Of these, the majority are located in the UK (or, in some cases, the UK branches of continental investment banks). Very few continental firms are classified as SIs. Most bulge bracket investment firms are on the list of SIs, so these investment firms account for most of the equity trading outside regulated markets and MTFs, combined with their OTC and possible crossing network activities.

Table 5: Systematic internalisers

Investment Firm	CA	Number of shares which the SI provided a quote for and traded in Q4 2008 ²⁵	Total volume ²⁶ Q4 2008 Turnover
ABN AMRO BANK N.V.	AFM	1305	£18,834 million
BNP Paribas Arbitrage ²⁷	AMF	42	£7 million
Citigroup Global Markets	FSA	478	£22,438 million
Citigroup Global Markets U.K. Equity	FSA	172	£7,174 million
Credit Suisse Securities Europe	FSA	705	£33,234 million
Danske Bank	Finanstilsynet	80	DKK 6,044 million
Deutsche Bank Aktiengesellschaft, Frankfurt/Main, Germany	BaFin	792	£14,033 million
Goldman Sachs International	FSA	98	£179 million

²³ This information is published via the CESR MiFID Database.

²⁴ There are 12 SIs in Table 5 and 13 SIs listed on the CESR database. This is because two firms (Citigroup and UBS) have chosen to structure their business in a way which results in two SI operations within the firm. UBS publishes combined reports via Markit BOAT, Citigroup reports as two SIs.

16

²⁵ This number does not include shares for which the SI provided a quote but did not trade. This figure includes the number of different shares, not the number of trades. If the share's ISIN has changed, it may be double-counted.

²⁶ Total volume refers to total volume of transactions where the acronym SI has been used instead of the venue identification in respect of a transaction in a share that is executed in a firm's capacity as a SI in respect of that share. It is intended to capture transactions that are subject to transparency obligations contained in Article 27(3) of the MiFID Implementing Regulation.

²⁷ BNP Paribas Arbitrage commenced its SI operations in December 2008.



Knight Equity Markets International	FSA	n/a ²⁸	n/a
Nomura International	FSA	n/a ²⁹	n/a
Nordea Bank Danmark A/S	Finanstilsynet	20	DKK 7,513 million
UBS and UBS AG (London Branch)	FSA	827	£29,536 million

Source: Markit BOAT Quarterly SI Reports

Quoting strategies

- 54. UK SIs have adopted differing business strategies. Whilst most have chosen to provide quotes in virtually all shares considered liquid for the purposes of MiFID Article 27, a couple of firms limit their systematic internalisation business to the 100 or so most liquid shares. In relation to quoting, some firms provide two-sided quotes, while others use the flexibility provided by MiFID and provide only one-sided quotes. There are also marked differences in terms of the sizes at which SIs elect to provide quotes, with some quoting only in a single share or a nominal size and others providing quotes up to standard market sizes (SMS) or larger. SIs' quotes tend to be pegged to the primary market³⁰, often at slightly less competitive prices than the best market prices, although some SIs always match the best bid or offer. None of the current UK SIs deal with retail customers. As a result, such SIs are not constrained by price improvement restrictions for quoted prices that fall within a public range close to market conditions. Accordingly, most UK SIs tend to improve on their quotes. In contrast, the Danish and French SIs offer two side quotes for retail clients. For the Danish SIs, the quotes match the best bid and offer on the primary market. UK SIs' and at least one continental SI's quotes are published on Markit BOAT and further disseminated by market data vendors.
- 55. MiFID requires SIs to publish all completed transactions and to identify themselves as the trading venue, unless they publish quarterly statistical information about their systematic internalisation business (in which case they can use the acronym 'SI'). All SIs using Markit BOAT to publish quotes also publish (through Markit BOAT) aggregated quarterly reports identifying all trades in their capacity as SIs. The Danish SIs publish these aggregated reports quarterly through NASDAQ OMX Nordic. The reports are available free of charge within one month of the end of each calendar quarter and contain the following information regarding each share shown for each trading day of the calendar quarter: highest and lowest price, average price, total number of shares traded and total number of transactions.

Key issues

56. There are questions raised in the answers to the Call for Evidence on the small number of investment firms currently classified as SIs and identified as such in the CESR MiFID database. In particular, it was noted that the vast majority of SIs are located in the UK and very few continental firms have informed their home Member State competent authority that they carry out systematic internalisation. There are also issues regarding the way in which SIs have been fulfilling their quoting obligations.

2.2 Emerging post MiFID landscape: impact on trading costs and sustainability of this development

57. Eighteen months after the implementation of the Directive, any assessment of the impact of MiFID on trading costs must make a clear distinction between explicit or direct costs (fees charged by trading venues and other direct execution costs) and implicit or indirect costs (spreads, market impact) and other indirect costs such as IT or market data costs.

²⁸ Knight Equity Markets International commenced its SI operations in January 2009.

²⁹ Nomura International previously operated its SI operations as Lehman Brothers UK.

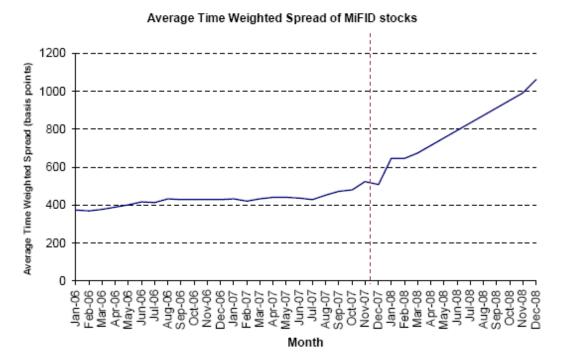
³⁰ Prices are automatically adjusted in line with the primary market as it moves.



- 58. As regards explicit costs, respondents to the Call for Evidence agreed that the decrease in fees charged by individual trading venues was proportionate to the increase in the level of competition between trading venues trying to attract market share of trading in the same markets. New MTFs developed aggressive market entry strategy based on extremely competitive fees while incumbent exchanges implemented fee reductions or new pricing policies taking into account the moving environment in which they operate. Fee reductions or revised price lists by some regulated markets may have nonetheless been more significant for algorithmic trading than for retail trading, in consideration of the increasingly important role of the former in the provision of liquidity to the market.
- 59. However, although the fees charged by individual trading venues have decreased post-MiFID, it does not follow that the same applies to other direct execution costs. Conversely, according to some respondents, the overall amount charged globally by broker-dealers for the execution of the same amount of trade may have increased as a consequence of market fragmentation and the significant decrease of quantities available at the best price on each trading venue, linked to the development of algorithmic trading and move to trading in three (or more) decimals. The combination of those elements has led to a higher number of executions on multiple venues required for the execution of one order which ultimately increases costs of trading.
- 60. Actually, the combination of smaller average trade size and the increase in technology spent to trade in a more fragmented environment has meant that the savings in execution costs may not be as great as they might have been when considering the decrease in individual trading fees. In addition, the extent to which fee reductions at trading platforms have been passed by investment firms to their clients remains to be assessed. There are indications that at least for retail client orders this has not been the case.
- 61. As part of the increase in overall trading costs, some respondents stressed the costs involved in seeking liquidity in competing venues. Fragmentation also makes it less easy and more expensive to undertake appropriate transaction cost analysis. Views were expressed that the fragmentation of trading and pre- and post-trade data and the decrease in overall transparency have resulted in higher price discovery costs. Concerns over the integrity and cost of data and the direct or indirect impact on trading costs (e.g., missed opportunities) were also reiterated.
- 62. As regards implicit costs, in their answers to the Call for Evidence some regulated markets, stressed the increase of spreads in their most actively traded shares since the end of 2007. Data supporting such evolution of spreads at the main European exchanges was also provided by industry participants at the roundtable held by CESR. However, respondents agreed that the reasons for the widening of spreads are not necessarily obvious and that it is difficult to isolate the effects of MiFID and market fragmentation from those of the current financial turmoil. Conversely, based on available indications, there does not appear to be evidence that indirect costs have lowered at regulated markets as the result of competition and of the increase in the number of venues.



Graph 2: Time weighted average spreads of MiFID stocks on the London Stock Exchange from January 2006 to December 2008.



Source: London Stock Exchange response to the CESR Call for Evidence on the Impact of MiFID on Secondary Markets Functioning, 9 January 2009.

- 63. Views were expressed that spreads have fallen for algorithmic trading, together with trading in smaller size, but that spreads for larger trades may not have narrowed because of market volatility and price uncertainty on balance.
- 64. It has also been recalled that the cost of post-trading services is the largest component of the overall trading cost. On the clearing side, the benefits of reduced fees by incumbent CCPs and very competitive ones by newcomers were considered by respondents to the Call for Evidence to be partly offset by the costs of linking to multiple CCPs and by increasing costs for margin payment at multiple CCPs (see also section 2.4).
- 65. The long-term sustainability of lower fees will depend on the long-term viability of the business models on the trading and on the clearing side. Any assessment as to whether increased spreads will remain as key post-MiFID element would require in the first place an analytical work to try and balance the potential respective roles of the current financial crisis on the one hand, and market fragmentation coupled with potential deteriorated transparency in pre-trade information on the other hand.

2.3 Emerging post-MiFID landscape: equity market data

2.3.1 MiFID framework

- 66. Prior to the implementation of MiFID, in the vast majority of Member States, trading in shares was concentrated on a regulated market, or where it was permissible to transact away from a regulated market's systems, it was typically reported to a regulated market in jurisdictions where OTC post-trade transparency existed pre-MiFID. This had the effect of concentrating trade information for each share in one (or a few) places, providing market participants with a consolidated view of trading in a particular share.
- 67. MiFID introduced competition in trade publication services by giving investment firms, when trading as SIs or OTC, choice in where they publish their transparency information. As a



result of this choice, data is not available from only one or a small number of sources but instead it can be available from a number of different sources depending on where it is published. Fragmentation of transparency information, if not addressed properly, raises concerns because it could undermine the overarching transparency objective in MiFID, and may result in less transparent markets than was the case pre-MiFID. In order to achieve efficient price discovery and facilitate achievement and monitoring of best execution, trade information published through different sources needs to be reliable and brought together in a way that allows for comparison between the prices prevailing on different trading venues.³¹

2.3.2 Market developments

- 68. With the implementation of MiFID there was an expectation that market forces would take steps to provide market participants with a way of accessing a consolidated set of data, and in fact a number of initiatives have been put in place with this aim. CESR has published guidelines and recommendations that are intended to facilitate a consistent understanding of the MiFID provisions relating to the consolidation of market information and to reduce barriers to consolidation of transparency information.³² In the UK the Trade Data Monitor (TDM) framework for consolidation of post-trade information was implemented. TDMs check the trade publication in real time for potential inaccuracies and arrange for the information to be made publicly available in a way to facilitate consolidation with similar data from other sources. Data vendors have also made efforts to facilitate data consolidation. For example:
 - Thomson Reuters provides consolidated data within its ".x" consolidated Reuters Instrument Codes covering the 1500 most actively traded European equities and providing a Best Bid and Offer across the multiple trading venues and a consolidated tape of all trades published through regulated markets, MTFs and OTC reporting venues such as Markit BOAT;
 - Bloomberg provides a European data composite of over 8.000 shares which includes approximately 50 venues; and
 - Markit BOAT consolidates pre- and post-trade data from over 25 financial institutions that use the platform to meet their MiFID-related OTC equity reporting obligations for approximately 8,000 stocks listed across Europe.
- 69. However, data consolidation is only as helpful as the quality of the data consolidated (see Section 4.2.1).

2.4 Emerging post-MiFID landscape: post-trading services

2.4.1 MiFID framework

-

70. Although clearing and settlement is not at core of MiFID, MiFID includes provisions under which regulated markets may enter into appropriate arrangements with a central counterparty or clearing house and a settlement system of another Member State to provide for the clearing and/or settlement of some or all trades concluded by market participants under their systems. The competent authority of the regulated market may not oppose the use of such central counterparty and/or settlement systems in another Member State unless where this is necessary to maintain the orderly functioning of that regulated market, taking into account the oversight/supervision of those post-trading infrastructures by their home competent authority. MiFID also provides for the access of investment firms of other Member States to domestic

³¹ Recital 34 of MiFID states that fair competition requires that market participants and investors are able to compare the prices that trading venues (i.e. regulated markets, MTFs and SIs) are required to publish. To this end "it is recommended that member states remove any obstacles which may prevent the consolidation at European level of the relevant information and its publication".

³² CESR Level 3 guidelines and recommendations for the consistent implementation of the Directive 2004/39/EC and the EC Regulation 1287/2006 on "Publication and Consolidation of MiFID Market Transparency Data" (February 2007)



CCPs and settlement systems and for the right for members of regulated markets to designate the system for the settlement of their transactions on such regulated markets, subject to certain conditions.

2.4.2 Market developments

- 71. Since the implementation of MIFID, the post-trading area, and more specifically the CCP area, has been subject to rapid changes mainly driven by new entrants.
- 72. As new MTFs have been entering the market (see section 2.1.3), the post-trading models of those MTFs have typically involved using a newly established CCP, then using agent banks to connect to incumbent CSDs. Two newly established CCPs have been capturing this new clearing business through aggressive pricing:
 - Euro CCP, a UK Recognised Clearing House based in London, and a subsidiary of DTCC, acts as a CCP for Turquoise, Smartpool (for non Euronext stocks) and NYSE Arca;
 - the European Multilateral Clearing Facility (EMCF), a Dutch-based subsidiary of Fortis subject to the supervision of the AFM and the DNB under contractual arrangements, act as CCP for Chi-X, BATS Trading and NASDAQ OMX Europe and will do so for Burgundy. It is worth noting that NASDAQ OMX took a minority stake in EMCF in October 2008 and that EMCF is now offering CCP services for the Nordic regulated markets of NASDAQ OMX as an alternative to the current non-CCP clearing and settlement systems.
- 73. So far, all regulated markets have retained their original CCP. According to the respondents to the Call for Evidence, the interoperability concept developed in the Infrastructures Code of Conduct³³ prior to the implementation of MiFID to promote competition between CCPs for clearing the trades made on the same trading venues has delivered limited results. There are very few examples of CCPs interoperating with each other. So far a noticeable achievement in this area is the initiative taken by the LSE to offer an option between two CCPs, LCH Clearnet Ltd and SIS x-Clear, for the clearing of transactions executed on the LSE and the interoperability achieved between those two CCPs.
- 74. Respondents to the Call for Evidence stressed the positive impact of new entrants and more competitive clearing fees. Faced with the competition of new entrants, incumbent CCPs had to adapt through several sequences of changes to price levels as well as pricing policies, although it is fair to recognise that the decrease in clearing fees is a trend that was initiated prior to the implementation of MiFID. In spite of this move, the new entrants in the clearing market remain by far the ones charging the lowest fees per transaction cleared, thus supplementing the very competitive fee structure already implemented at trading level by their respective MTFs.

Key issues

- 75. In spite of this positive impact on fees, views were also expressed in the responses to the Call for Evidence that loss of efficiency in the post-trading (e.g. need to post margins at multiple CCPs, complexity arising from the varying settlement rules of multiple CCPs) offsets the benefits of more competitive clearing.
- 76. It was also stressed that, whilst additional competition in the clearing space is beneficial in terms of providing additional choice for market participants, it is critical for the integrity and stability of equity markets in Europe that competition does not take place at the expense of high quality risk management standards and systems.
- 77. Concerns expressed as to the remaining barriers to competition in the post-trading area are further developed in Section 5.3.

³³ The Code of Conduct was entered into on a voluntary basis by market infrastructures in November 2006 under the auspices of the European Commission to promote transparency and comparability of fees, interoperability across systems and unbundling of services.



3. Pre-trade transparency issues

3.1 MiFID pre-trade transparency regime: purpose and general obligations

3.1.1 MiFID framework

- 78. MiFID introduced pre-trade transparency obligations which aim to provide the wider investing public with access to information on current opportunities to trade on a timely basis. Pre-trade transparency obligations were also devised as a way of mitigating potential adverse impact of market fragmentation, promoting the efficiency of the overall price formation process and assisting the effective operation of 'best execution' obligations.
- 79. MiFID imposes the same pre-trade transparency obligations on trading taking place on regulated markets and MTFs. In particular, there is a generic obligation to make public details of best bids and offers on reasonable commercial terms. The precise content of information (e.g. number of quotes, depth) depends on the trading system offered by the trading platform.
- 80. Allowances, in the form of waivers, have been made in the pre-trade transparency regime for certain types of orders and systems.
- 81. MiFID allows competent authorities to grant four types of waivers. These are for:
 - 1. Systems based on a trading methodology by which the price is determined in accordance with a reference price generated by another system, where that reference price is widely published and is regarded generally by market participants as a reliable reference price. ('Reference price waiver')
 - 2. Systems that formalise negotiated transactions ('Negotiated trade waiver'), each of which meets one of the following criteria:
 - i. Is made at or within the current volume weighted spread reflected on the order book or the quotes of market makers of the regulated market or MTF operating that system or, where the share is not traded continuously, within a percentage of a suitable reference price, being a percentage and a reference price set in advance by the system operator.
 - ii. Is subject to conditions other than the current market price of the share.
 - 3. Orders that are held in an order management facility maintained by the regulated market or MTF pending their being disclosed to the market ('Order management facility waiver').
 - 4. Orders that are large in scale compared with normal market size. ('Large in scale waiver')
- 82. As noted above, it is the competent authorities' prerogative to waive the pre-trade transparency obligations. However, recital 12 of the MiFID Implementing Regulation requires competent authorities wishing to implement the waivers to do so for all trading facilities and to treat all regulated markets and MTFs equally and in a non-discriminatory manner. In addition, the European Commission has stated that, while the interpretation of MiFID transparency requirements should be broad, the waivers should be interpreted narrowly.
- 83. These allowances enable 'dark pools of liquidity' to operate within the MiFID framework. Although not a term defined in MiFID, in the context of this report a dark pool of liquidity ('dark pool') is a regulated market's or MTF's trading facility where there is no pre-trade transparency, i.e. where orders are not publicly displayed, based on pre-trade transparency waivers provided by MiFID. Similarly, a dark order is an order that is not publicly displayed on the basis of the pre-trade transparency waivers provided by MiFID.
- 84. Stop orders and large in scale orders are examples of dark orders which can be submitted to transparent order books. As for dark pools, transactions involving dark orders executed on otherwise transparent order books must be published in real time³⁴.

3.1.2 Market developments

³⁴ Where not eligible to deferred publication.



85. Since over the past two years or so there has been much attention on the evolution of dark pools and dark orders. Currently, there are nine dark pools operated by regulated markets and MTFs in Europe, most of which were launched after MiFID came into force (see Table 6 below). However, it is important to note that whilst the number of trading platforms offering dark pools has increased noticeably, in aggregate they are unlikely to have attracted much liquidity. It is unclear how the market will develop with respect to dark pools and this is a space whose development regulators may wish to monitor to better understand the impact dark pools may have on the market (see discussion below on policy implications of dark pools of liquidity).

Table 6: Trading platforms providing 'dark pools'

Trading platform	Type of dark pool	Launch date
Euro Millennium (NYFIX)	Reference price	March 08
Instinet Blockmatch	Large in scale	June 08
Liquidnet Europe	Negotiated trade	November 02
Midpoint Xetra	Reference price	November 08
Plus Markets	Large in scale	November 07
ITG Posit Now	Reference price	February 07
Smartpool	Reference price	February 09
Turquoise Services	Large in scale	September 08
Block Board (Pipeline)	Large in scale	April 09

Source: NYFIX, Instinct, Liquidnet, Deutsche Bourse, Plus, ITG, Smartpool, Turquoise, Pipeline

86. Many dark order types on transparent order books are not new and were offered by many European regulated markets prior to the implementation of MiFID (e.g. stop orders, iceberg orders). It is therefore unlikely that these order types are now more widely used than before the implementation of MiFID.

3.2 Issues surrounding the MiFID pre-trade transparency regime

3.2.1 Pre-trade transparency waivers

- 87. As illustrated by the number of trading platforms which have launched dark pools since MiFID came into force, trading platforms are keen to avail themselves of the pre-trade transparency waivers and many of them have been innovative in developing proposals which they felt responded to user demands and were within the terms of the pre-trade transparency waivers.
- 88. However, there have been some significant interpretation issues, which have resulted in real practical difficulties:
 - Many trading platforms and their users are of the view that the waivers are being interpreted too narrowly, are not keeping pace with market developments and are stifling innovation;
 - There are divergent views within CESR membership on the scope of the waivers. This lack
 of consistency and certainty is seen by trading platforms and their users as endangering the
 level playing field; and



- Many trading platforms contend that the gap between the average order size and the large-in-scale thresholds is too wide and that as a result trading participants do not get adequate protection from market impact when submitting transparent orders. This, it is claimed, has the effect of encouraging market participants to execute trades outside regulated markets and MTFs. Furthermore, it has been suggested that because the large-in-scale thresholds are only set once a year, it is particularly problematic in times of volatility like we are currently experiencing.
- 89. CESR has recognised that there are difficulties with the implementation of MiFID pre-trade transparency waivers and has agreed to a number of initiatives. First, CESR has launched a process whereby proposals for the utilisation of pre-trade transparency waivers are submitted by competent authorities for discussion within CESR. The aim of this process is to ensure a consistent application of the MiFID pre-trade transparency waivers. In addition, CESR agreed in February 2009 to undertake a review of the existing MiFID waivers starting in the second half of 2009. The Commission has also indicated that it may review the waivers in the context of its work on MiFID transparency waivers which is expected to be completed in 2010. CESR work on the waivers would feed into such review.

3.2.2 Systematic internaliser regime

90. Questions have arisen as to the way in which SIs have been fulfilling their obligations. In particular, it has been striking that a number of firms have predominantly used one-sided quotes and/or quoted in only a token number of shares, and sometimes only one share. Although the MiFID Implementing Regulation permits this, market participants have seen this as conveying little useful information about the size in which firms are, in practice, willing to trade, or the prices at which they will trade. CESR recognises that there are issues surrounding the value and nature of the SI obligations and recommends that these form part of the Commission's review.

3.2.3 Internal matching by investment firms ('crossing systems')

One issue raised by a number of operators of regulated markets and MTFs has been the ability of investment firms to match client orders internally without pre-trade transparency. Some regulated markets are of the view that barriers to a level playing field exist with respect to pretrade transparency obligations (see section 5.2). In particular, there are claims that crossing networks operated by investment firms are not subject to appropriate pre-trade transparency. Where these systems for instance match client business only at the mid-point of the main reference market - an approach to matching under which MTFs already operate without pretrade transparency, the question is posed as to whether present arrangements create potential for regulatory arbitrage and whether it would be of benefit for firms operating such systems to be brought within a marketplace definition. However, some crossing networks may operate under different modes. Further consideration of this issue needs to take account of the specific characteristics under which those crossing networks operate and whether the pre-trade transparency regulations for regulated markets and MTFs require any adjustment. Some operators of regulated markets and MTFs themselves consider that a better approach to addressing any potential for regulatory arbitrage would be for regulators to recognise that platforms need more flexibility in their transparency obligations. This issue should be considered in the Commission's review.

3.3 Policy considerations

92. In this section, some key policy considerations surrounding pre-trade transparency that CESR plans to take into account when undertaking its review of the MiFID pre-trade transparency waivers in the second half of 2009 are discussed.

3.3.1 Price formation and overall market quality



93. Pre-trade transparency is important for the price discovery process, the efficient functioning of the markets and the fulfilment of best execution obligations, in particular if 'smart order routers' are used by investment firms to provide best execution. Pre-trade transparency also plays a role in mitigating the potential negative impact of market fragmentation. It has been argued that the frequent use and existence of waivers has lead to decreased pre-trade transparency and questions have been raised as to whether dark pools and dark order types provide sufficient transparency. However, while by definition dark pools do not provide any pre-trade transparency, they are required to meet post-trade transparency obligations. One of the key policy issues that will need to be addressed is the potential impact of dark pools regarding the price discovery process. In that context, consideration will be given to the potential impact of dark pools on the quality of markets with displayed orders. Because dark orders are not displayed, they do not contribute to price discovery and have the potential to erode the quality of such displayed markets through widened spreads and decrease in market depth. This may become all the more significant where dark pools and dark orders account for a certain percentage of overall trading volume.

3.3.2 Execution of orders

- 94. Industry participants consider that dark pools and dark order types play an important role in European trading and that they are important for investors and portfolio managers. The use of dark pools avoids the market impact of certain investor decisions.
- 95. Some industry participants are of the view that dark pools can be beneficial in achieving best execution for a client. There are also claims that the interaction between displayed and undisplayed liquidity strengthens the operation of displayed order books by allowing greater automated interaction and drawing liquidity from otherwise undisplayed systems. However, the accumulation of selected individual interests may not lead to the optimal public interest and the benefits gained by certain industry participants need to be weighed against the impact on overall market quality. In addition, the overall benefit of attracting OTC trading on organised public venues at the expense of a high level of pre-trade transparency on those venues remains to be assessed.

3.3.3 Level playing field

96. Although CESR has so far not seen evidence of dark pools of liquidity attracting significant market share, the traditional exchanges have expressed concerns regarding the increasing popularity of dark pools of liquidity, including crossing networks. They state that these crossing networks are often in a regulatory vacuum and that they retrieve liquidity from the traditional exchanges, thereby harming the price discovery process and increasing trading costs. Exchanges are concerned that the general trend of trading moving away from 'transparent, well-regulated markets' to OTC platforms or broker dark pools may raise price formation issues and lightly supervised platforms create systemic risk to the market. A review of the pre-trade transparency waivers will aim at identifying any concerns related to the use of dark pools and dark order types. A more detailed discussion of level playing field considerations is provided in Section 5.2.

3.4 Conclusions and next steps

97. Many issues were raised in the Call for Evidence, ranging from interpretation issues to potentially undesirable impacts on innovation and unlevel playing field between various trade execution venues. CESR is already taking steps to address some of these concerns – for instance, by having launched a process for considering future applications for waivers and by undertaking a review of all pre-trade transparency waivers starting in the latter half of this year.



4. Post-trade transparency issues

4.1 Calibration of the MiFID transparency regime

- 98. The MiFID transparency regime relies on an approach based on the categorisation of shares with the aim of defining liquid shares, standard market sizes, orders that are large in scale compared to normal market size as well as a deferred publication regime.
- 99. When asked whether the categorisation of shares was appropriate, respondents to the Call for Evidence expressed mixed views. Some respondents felt that the categorisation of shares was appropriate while others considered that it was not the case.
- 100. In particular, some respondents questioned the appropriateness of the qualifying sizes for trades eligible for deferred publication. Other respondents felt that delays were often too long to ensure adequate transparency and that, in some instances, investment firms seemed to avail themselves of the maximum delay under MiFID even when the risks were already unwound. On the other hand, as noted above, some respondents felt that the MiFID transparency regime was well calibrated and that there was no need to change. Some respondents also expressed the view that the post-trade transparency regime had not been in place for long enough and that it would be preferable to wait and see how the market evolved before considering amendments to the various parameters of the transparency regime. In their response to the Call for Evidence, some trade associations³⁵ also noted that given that delays exist in order to protect clients from the impact of premature disclosure of a trading interest, there is no reason why firms should not report large trades immediately after the risk has been offset. They added that such matters should be dealt with via statement of good practice by the industry or regulators.
- 101. CESR welcomes industry initiatives to foster the publication of reports for large trades once a firm is no longer at risk even if it is before the expiry of the full MiFID delay permissible for a trade for that particular size, pending the Commission's review of the MiFID deferred publication regime. In order to prepare to contribute to the Commission review of the MiFID deferred publication regime, CESR will undertake work in the second half of this year, focusing in particular on whether qualifying sizes for trades eligible for deferred publication and the delays provided remain appropriate.

4.2 Quality of MiFID data

102. Concerns were expressed in the responses to the Call for Evidence over the quality of the MiFID post-trade transparency information as well as the quality of the CESR MiFID database.

4.2.1 Quality of MiFID post-trade transparency data

103. In their responses to the Call for Evidence and at the CESR roundtable, many market participants noted that the quality of the transparency data has deteriorated significantly since MiFID was implemented in November 2007. Concerns over the quality of the transparency data were particularly pronounced in jurisdictions where all equity transparency information was previously published by the main regulated market. In those jurisdictions, the main regulated market not only consolidated equity data but monitored the quality and took appropriate remedial action as necessary.

104. According to market data vendors who responded to the Call for Evidence, investment firms do not always take the necessary steps to ensure that equity trade data is accurate and reliable, leading to a confusing picture of the OTC market. This contrasted with equity data from regulated markets and MTFs which is generally considered to be of high quality.

³⁵ Joint response by the following trade associations: LIBA, ASSOSIM, BBA, BWF, DSDA, FFFS, ISDA, NSDA, SIFMA and SSDA.



- 105. Other examples of errors identified by market data vendors included:
 - Misapplication of decimal point or reporting a trade in wrong currency (e.g. Euros instead of US dollars);
 - Late correction of errors: according to market data vendors, investment firms do not correct
 errors in trade reports in real time or as soon as an error has been detected, but make a
 correction often more than a day after the original, erroneous trade reports were submitted.
 This makes it difficult for market data vendors to identify which trades have been corrected;
 - 'Late' reporting as many investment firms routinely use the full 3-minute period to report a transaction, rather than reporting a trade in real time and using the full 3 minutes as an exception;
 - Investment firms often use the full delay provided by MiFID for large trades, instead of publishing them when they are no longer at risk;
 - Trades are sometimes reported more than once, again leading to a distorted picture of the market; and
 - Lack of a standard format for publishing trades.
- 106. CESR recognises the importance of having trade information of sufficient quality and is concerned about the deterioration which has followed MiFID implementation. It also recognises that there is not a single solution to improve the quality of data and that the problems raised in the responses to the Call for Evidence reflect different issues, ranging from lack of clarity in the publication obligations to potential deficiencies in firms' compliance with their MiFID obligations.
- 107. Work is already underway within CESR which may help bring greater clarity about who should be publishing a trade and what information should be published. For example, CESR is currently working on defining 'execution of a transaction' for transaction reporting purposes. The result of this work could inform the future work by CESR on clarifying what should be published and by whom. Also, in view of the feedback received from market data vendors, CESR considers whether it would be helpful to revisit the CESR Level 3 guidelines. Clarifications might be needed in relation to the requirement of MiFID to make public posttrade information as close to real time as possible and the related provision of the MiFID Implementing Regulation that sets a maximum deadline of three minutes for the publication of this information. Furthermore, there might be a need to provide further guidance on the investment firms' obligations under Article 32(1)(a) of the MiFID Implementing Regulation in relation to the requirement to ensure that the information to be published is reliable, monitored continuously for errors, and corrected as soon as errors are detected. Recognising that some of the deficiencies may be linked to less than satisfactory compliance with MiFID transparency obligations, CESR Members have agreed to raise data quality issues with their investment firms and to take supervisory action as appropriate.

$4.2.2\ Quality\ of\ the\ CESR\ MiFID\ database$

- 108. MiFID contains obligations that apply not only to market participants but also to competent authorities and CESR. In the connection of the implementation of MiFID CESR put in place a number of systems and databases to facilitate the application of the MiFID pre- and post-trade transparency regime and the publication of a list of identifiers of regulated markets, MTFs, SIs and central counterparties.
- 109. On the accuracy of information published by CESR, one respondent stated that the CESR MiFID database often has errors in the information provided and therefore suggested the introduction of a validation process before shares are admitted to the CESR MiFID database.
- 110. In this respect, CESR has been working on improving the functioning of the CESR MiFID database through consultation of market participants (Ref. CESR/07-832 and CESR/08-141) in order to allow the smooth running of the database, facilitate updates and ensure a clear



presentation of the data for market participants. CESR has implemented a detailed procedure to be applied by competent authorities to update the information provided in the CESR MiFID database.

111. CESR also decided to establish a list of national contacts in CESR Members (Ref. CESR/08-251), to which questions pertaining to the content of specific entries should be sent. This contact list is used to contact the relevant competent authority if someone has a query regarding shares which have been included in or excluded from the list, the calculations for a specific entry or the status of a share as liquid/not liquid. Competent authorities have so far received some questions, most of them related to the calculations of the interim period, delistings, changes or errors in ISIN codes or dual listings. The relevant competent authorities are working on improving the content of the information included in the MiFID database in order to improve its accuracy and avoid errors in the information provided. In addition, CESR has agreed to set up a system to monitor the number as well as the nature of questions raised by external stakeholders. This will enable CESR to better assess the nature and extent of problems and make appropriate recommendations if required.

4.3 Cost of data

- 112. Some industry participants have claimed that the cost of accessing market data is restricting the availability of that data. Two specific concerns have been expressed: the price for real-time data as well as the lack of standard delay for the publication of free market data.
- 113. The European Securities Markets Expert Group (ESME) has recently conducted a fact finding exercise regarding the availability of post-trade data in equities in the EU.³⁶ It concluded that there is no specific evidence which would support recent complaints of an overall and substantial increase of data fees since the introduction of MiFID.³⁷ However, the report noted that there is a potential problem, particularly for smaller data users, that an increase in competition due to increasing market fragmentation is leading to increased costs because of the need to obtain data from a wider range of sources to get a complete picture.
- 114. Data vendors are taking steps to address concerns about the cost of accessing data. For example, one UK market data vendor has recently introduced a new pricing model which enables users to purchase information relevant to them at a cost per market segment, rather than being required to purchase all information at one set price.
- 115. The ESME report concluded that overall the availability of post-trade data in equities in the EU appears to be good in that there is sufficient choice. Products and delivery methods for the needs of different market participants also exist at a reasonable cost. However, ESME suggests that the development of the situation should be monitored. In view of these conclusions, CESR intends to monitor developments with respect to the cost of data, for which an appropriate process will be developed.

4.4 Consolidation of data

116. As noted in Section 2, MiFID introduced competition in trade publication services by giving investment firms, when trading OTC, choice in where they publish their transparency information. As already underlined by CESR, fragmentation of transparency information, if not addressed properly, could undermine the overarching transparency objective in MiFID. In this respect, trade information published through different sources needs to be reliable and it should be available in a format that is easy to consolidate and that is capable of being readily

understood and available at a reasonable cost.

117. Significant segments of the industry (particularly buy-side firms) are of the view that it is still very difficult to get a complete picture of the market and that market forces have not yet

³⁶ http://ec.europa.eu/internal market/securities/docs/esme/report-data-availability en.pdf

³⁷ It did note that there is one exception to this and assumed that self-regulation would fix the outlier and noted that the data publisher has recently amended its pricing structure to address the issue.



delivered a suitable solution to data fragmentation. Buy-side firms remain sceptical and are arguing for a US-style mandatory consolidated tape. On the other hand, some market participants believe that commercial forces will be able to provide an effective consolidation of data. Those against such regulatory intervention emphasised that it would be counterproductive for the following reasons: it would stifle innovation; it would be very expensive to implement; data users would still need to acquire data commercially (e.g. if they wished to get more in-depth data); it would be politically difficult to agree on location within Europe; it would introduce latency; and it would reduce the concept of best execution to an analysis of costs, to the detriment of other factors.

- 118. The ESME report on the availability of post-trade data in equities in the EU also acknowledged that data users are concerned about the amount of time it is taking to consolidate data. However, ESME noted that there are already initiatives in place and that this development shows that self-regulating forces are an inherent factor in market data industry.
- 119. CESR acknowledges the work done by ESME and intends to monitor developments with respect to consolidation, for which an appropriate process will be developed. CESR also notes that steps to improve the quality of transparency information should help facilitate the consolidation of equity market data and will take the outcome of the work on consolidation into account in any review of the Level 3 Guidelines.

4.5 Policy considerations

- 120. Post-trade transparency is important for the price discovery process, the efficient functioning of the markets and the fulfilment of best execution obligations. It plays a role in mitigating the potential negative impact of market fragmentation.
- 121. Obviously, if market transparency is affected by the factors mentioned above this will hamper the assessment on whether firms provide best execution. To provide best execution firms need to have access to reliable market data. Absence of a full picture of the market as a result of the poor quality or deferred publication of data or the total absence of data of certain markets makes it difficult for investment firms to get certainty on the best trading venues. Post-trade transparency information is required for both investors and investment firms to assess whether the investment firms have fulfilled their best execution obligations.
- 122. Furthermore, it is not only the availability of pre- and post-trade transparency information that affects the investment firms' ability to fulfil the best execution obligation, but also the cost of this information. As a result of the fragmentation of trading and the sometimes high costs venues charge for transparency data the total information costs have risen. Respondents to the Call for Evidence also felt that not all firms make their data available on a 'reasonable commercial basis'.
- 123. On best execution in general a significant number of respondents to the Call for Evidence felt that the concept of best execution is unclear because firms are unsure as to what factors should be considered when formulating their best execution policy. For instance, it was noted that a number of firms have decided that one certain platform is the best one to execute transactions and all trades are sent to that platform.
- 124. CESR recognises that the various initiatives discussed previously aimed at improving the quality, availability and consolidation of equity data will help the assessment of whether firms provide best execution. With respect to the lack of clarity of best execution obligations, CESR will consider the possible need for further work by CESR.

4.6 Conclusions and next steps

125. To conclude, it is suggested that CESR reiterates the importance of post-trade transparency for price formation, the efficient functioning of the markets, the fulfilment of best execution and to mitigate the potential negative impact of market fragmentation. As noted before, a number of concerns were raised in the responses to the Call for Evidence which require further consideration by CESR. It is recognised that there is not a single solution to the various issues



raised, but that a number of initiatives may help improve the quality and consolidation of post-trade transparency information. It is also recognised that further work needs to be done within CESR to better understand and assess issues surrounding the calibration of the deferred publication regime, the cost of accessing post-trade data and the consolidation of data.

5. Remaining barriers to a pan-European level playing field across trading venues

126. Responses to the Call for Evidence demonstrate a clear perception of outstanding barriers to a pan-European level playing field across trading venues. Regulated markets and MTFs are the ones mostly concerned by that unlevel playing field across trading venues (including OTC) and across Member States.

5.1 Supervision

- 127. Different sets of concerns were expressed. On a high level note, the perception is that regulators exercise their supervisory powers differently for different execution venues (regulated markets and MTFs) although those execution venues are subject to almost the same MiFID requirements. In order to ensure a true level playing field, it is necessary, according to some respondents, that competent authorities align their supervisory practices more closely.
- 128. According to the respondents to the Call for Evidence, regulators do not for instance require the same level of surveillance, system security and transparency obligations from MTFs and from regulated markets, putting the latter at a disadvantage. Regulators would also tend to assess regulated markets against models that have existed in the past whereas they would accept innovative solutions from alternative venues more easily.

5.2 Differing regulatory regimes

- 129. Concerns arising from different transparency requirements, and more globally, from different regulatory regimes applying to execution venues with almost the same business were also mentioned. Regulated markets and MTFs expressed concerns about the unlevel playing field with other forms of execution venues with less or no pre-trade transparency requirements, such as systematic internalisers and broker crossing networks.
- 130. It has been a surprise to many market participants that so few firms have so far notified that they are conducting systematic internalisation in equities. The large majority that have made notifications are based in, or have significant trading operations, in the UK. Although it seems that systematic internalisation has proved a less attractive business model than had once seemed likely, there may be an outstanding question, given the self-certification nature of the regime, as to whether firms are interpreting the regulation in similar fashion. It is important that Member State regulators ensure that they fully understand the nature and materiality of OTC trading undertaken by their firms, and are able to satisfy themselves as to when those firms are, or are not, acting as systematic internalisers.
- 131. Some respondents to the Call for Evidence were especially concerned by broker crossing networks which, according to them, would appear to be having the same business and conducting similar activities as those undertaken by organised venues, but are instead operating under the OTC umbrella. Larger firms that operate this functionality generally argue that what they do is no more than the automation of a traditional broking service that falls outside the MTF definition.
- 132. This issue of crossing networks was seen by some respondents as a MiFID regulatory gap which should be urgently closed, others were urging regulators to follow the "spirit" rather than the "letter" of the directive pending the MiFID review. Further consideration of this issue needs to take account of the way in which technology continues to facilitate the development of business models that still further blur the lines between broking services and operation of a trading platform.



133. Beyond high level comments on the lack of harmonisation in the implementation of MiFID across Member States and competent authorities, the examples provided of uneven implementation very much focused on the MiFID pre-trade transparency waivers granted, or not granted, to some type of orders. This issue is discussed in greater detail in Section 3.

5.3 Post-trading services (clearing and settlement)

134. In the related post-trading area, remaining barriers to competition on one hand, and fragmentation of clearing and settlement on the other hand, were considered by some respondents to the Call for Evidence to be hindering the delivery of full benefits of competition in trading. Due to the lack of interoperability between CCPs and CSDs, it was argued that arbitrage across trading venues is more complex and costly. CESR has recently provided its preliminary technical advice to the European Commission in response to the Commission's mandate on access and interoperability arrangements³⁸. The complexity arising from the varying settlement rules which apply to MTFs, SIs and regulated markets (e.g. each trading venue has its own buy-in rule) was noted as another example of how post-trading can hamper competition in trading. Articles 34(2) and 46 of MiFID, which give a key role to the competent authority of the regulated market or the MTF when assessing their post-trading infrastructures, instead of relying on the competent authorities of such infrastructures, were considered by some to be one of the reasons for remaining regulatory barriers to competition in the post-trading area. The ability for a clearing and settlement provider to operate in a Member State is subject to that entity having appropriate regulatory permission in that Member State.

5.4 Policy considerations

- 135. MiFID aims at promoting competition in equity trading across trading venues, in particular between regulated markets and MTFs, through a functional approach. As stated in Recital 6 of MiFID, regulated markets and MTFs "represent the same organised trading functionality". With a key exception regarding admission to trading, MiFID provisions governing regulated markets and MTFs are broadly similar, although sometimes more detailed or demanding for regulated markets (see for instance Article 39 on organisational requirements). Those more detailed or demanding provisions, leaving less room for interpretation, can be explained by the predominant role of regulated markets in equity trading, combined with long-standing national regulations and the regulated markets' unique role regarding admission to trading and the potential damaging consequences of disruptions at any trading platform that accounts for 80 % or more of trading in the shares for which it offers trading.
- 136. Although MiFID provisions governing regulated markets and MTFs are broadly similar, it may not be unreasonable for regulators to have a proportionate approach of for instance the human or IT resources expected from an MTF when commencing its operations, provided that the requirements and obligations regarding for instance the setting up of a market surveillance department or the requirements for contingency planning are significantly strengthened with the increasing market share of that MTF.
- 137. Indeed, where an MTF has a turnover in equity trading higher than a regulated market (see Table 1), the question may be posed why such MTFs should not be subject, under MiFID, to as stringent requirements as those in place for regulated markets, among others under Article 39 of MiFID. Further consideration should be given to the issue taking into account the significant development of some MTFs. Under current MiFID, it is important that national regulators ensure that the risks, and the regulatory requirements arising from the operation of any trading venue are addressed in a way consistent with its activities and business model.
- 138. MiFID has tried to address the distinction between broker-dealers' activities and the operation of a platform through the concept of SIs (and MTFs operated by investment firms). Where an investment firm deals on own account by executing client orders on an organised, frequent and

³⁸ See http://www.cesr.eu/index.php?page=document_details&id=5572&from_id=56.



systematic basis, it qualifies as a systemic internaliser. However, where a broker internally matches client orders in an organised and frequent way through an automated crossing network, possibly using the waiver from Article 22 order display rule on a systematic basis to operate what can be characterised as another form of "dark pool" of liquidity, MiFID does not currently address this activity in any specific manner. The recent development of crossing networks, more common in some jurisdictions than SIs, might however deserve further attention.

- 139. The pace of market development since the finalisation of MiFID has been rapid, and is likely to remain so. To some extent, these developments in IT and business innovation may pose challenges to the existing MiFID categories (such as regulated markets, MTFs, SIs and OTC trading), by promoting convergence in the various aspects of trading functionalities offered under such categories. These developments need to be well understood so as to enable an appropriate assessment of the effectiveness of MiFID going forward.
- 140. Policy considerations regarding barriers to unlevel playing field in pre-trade transparency are discussed in Section 3.

5.5 Conclusions and next steps

141. MiFID aimed to develop competition and greater efficiency of equity trading while maintaining investor protection, This greater competition is raising concerns among trading platforms, by regulated markets vis-à-vis MTFs, and by regulated markets and MTFs vis-à-vis investment firms' OTC activities. Beyond the commercial interests underpinning the concerns expressed, it is important to be and remain aware of the challenges raised by the still recent introduction of the MIFID framework governing competition in equity trading so that action can be taken or recommendations made to address issues identified. A review of how trading functionalities are developing across the whole market could be a useful start of further consideration of the still blurring distinction between broker activities and the operation of a trading platform. The significance reached by some MTFs may lead to reconsider some differences in regulatory requirements for MTFs and regulated markets.

6. Impact of fragmentation on supervision

- 142. Supervisory authorities need to consider the consequences of increased fragmentation of equity markets and the risks this changing environment will lead to.
- 143. One of the main issues raised in the responses to the Call for Evidence and at the CESR roundtable was the quality of market data and especially data about OTC transactions. One fundamental change introduced by MiFID is post-trade transparency for OTC trades in shares admitted to trading on a regulated market in the EEA. In jurisdictions which already had this kind of disclosure obligation on a national level before the implementation of MiFID, the relevant change relates to the fact that OTC transactions do not need to be reported to and published by the market operators. Instead the publication of OTC transactions is the responsibility of the investment firms. The practical implication for regulators is that the number of firms that must be supervised in this regard has increased considerably. Before MiFID, supervising one exchange for the transparency obligations was sufficient. After MiFID you may have to add a large number of investment firms as well. Some of the respondents to the Call for Evidence expressed doubts about the capacity of various national authorities to supervise post-trade information.
- 144. MiFID requires investment firms to have an order execution policy. Investment firms must also be able to demonstrate to their clients, at request, that they have executed their orders in accordance with the firms' execution policies. The availability of reliable trading data is of importance in this respect.
- 145. In a fragmented trading environment firms have more choices of execution venues. MiFID requires firms to be transparent about the way they execute orders in an execution policy.



However, investor representatives at the CESR roundtable were concerned about the fact that the policies were to high-level.

- 146. It is expected that the number of investment firms that are participants in markets and clearing organisations in other EU Member States will go up. In case of a default of a significant participant, cross-border implications may become more frequent and regulators must be prepared.
- 147. MiFID has rules about suspension and removal of trading in financial instruments and exchange of information thereof. CESR has established procedures for cooperation in this regard. When fragmentation increases, the demand for routines and procedures that ensure that trading is suspended at the same time in all concerned markets will probably be higher. Compared with today's situation this will require authorities to have staff available when the markets are open and to possess better and more secure communication technology.

7. Objectives of MiFID

- 148. In respect of secondary markets, MiFID is designed to foster competition among trading venues, with the aim of reducing the cost of trading, on the basis of a regulatory level playing field and in an environment of market transparency aimed at supporting market efficiency and investor protection.
- 149. In general terms, industry participants suggested in their responses to the Call for Evidence that it might be too early to assess whether the directive's objectives have been achieved because MiFID has been in force for just over one year and, additionally, the market turmoil makes it difficult to isolate the effects of MiFID on the functioning of secondary markets. Industry participants were of the view that changes are still working their way through the system and it might be premature to draw more than provisional conclusions at this stage.
- 150. Furthermore, some industry participants were of the view that while the directive may have brought benefits to secondary markets, it has not yet done so in an uniform manner and time is needed to verify whether, in the future, the benefits will be extended geographically.
- 151. Some industry participants noted that the overall impact of MiFID on market quality and structure, the impact of disadvantages of an unlevel playing field between trading venues and the evolving dynamic between market players in the long term remain unknown.
- 152. With such a premise, industry participants indicated that:
 - MiFID has significantly facilitated competition in relation to equity secondary markets, by removing competitive barriers for MTFs. MiFID has increased the options open to market participants for execution of orders, especially for large orders;
 - MiFID led to the lowering of trading fees at the incumbent exchanges through the creation of competing venues; and
 - MiFID produced benefits in the form of availability of better prices (narrower spreads) on alternative markets.
- 153. On the other hand, industry participants also indicated that:
 - In spite of lowering trading fees at individual platforms, there has been an increase in trading costs due to a decrease in average order size requiring multiple executions;
 - There has been a decrease in overall transparency and market data quality coupled with increased IT costs for the search of liquidity which has contributed to the overall increase in direct and indirect trading costs; and
 - Firms engaged in proprietary and algorithmic trading are better placed than smaller agency firms to benefit from the post-MiFID environment.
- 154. Views were expressed that fragmentation has been useful to foster competition and innovation, but that MiFID has not been successful in its aims of achieving competition. Most market



- participants agreed that MiFID provisions have provoked increased competition, presenting more choices of execution venues and execution prices, together with the reduction of prices.
- 155. One of the main effects of MiFID has been the removal of concentration rules and/or, indirectly, of domestic tax rules to the same effect. This, along with the ability to passport services across borders, has promoted the entrance of new trading venues which has increased competition in trading services.
- 156. Industry participants were of the view that the implementation of MiFID has led to a large increase in the level of innovation in the equity secondary markets. MiFID has provided a framework for innovation in terms of the ability to establish alternative trading venues. Among others, it has led to the proliferation of new MTFs, a greater choice of trade reporting opportunities, and the development of new independent software services. However, according to their view MiFID represents one of many reasons why there has been so much innovation in the market and those changes would have arisen regardless of the implementation of MiFID.
- 157. As indicated earlier, there are questions to the extent to which investors are actually yet benefiting from MiFID. There are questions as to whether investors are benefiting from the increase in competition of trading services. There are also concerns over transparency in the market, in particular the quality of post-trade data and the lack of a consolidated set of market data.
- 158. Some industry participants considered that costs are already, or will be, outweighed by the benefits that MIFID brought in promoting competition. They stressed that current market developments should be allowed to occur, including in market data aggregation and that a rounded assessment of cost savings as well as costs for more competitive markets should be done before seeking to draw conclusions about the overall effect of MIFID. For some other industry participants, it is still unclear whether the various costs resulting from MiFID will be outweighed by the benefits. Concerns are expressed on the overall impact of MiFID on market quality and structure and the evolving dynamic between market players.

8. Summary of recommendations and conclusions

- 159. The European secondary markets landscape has changed considerably over the past 18 months. The number of trading platforms has increased considerably in a relatively short period of time. MTFs have been successful at eroding the market share of regulated markets, although traditional stock exchanges remain by far the dominant providers of equity trading services in Europe. Trading fees have come down, but there are suggestions these have been offset by increased costs from having to connect to multiple platforms and the implicit cost of trading in what have been extremely volatile market conditions by historical standards. Trading platforms have also responded to competitive pressures by expanding their trading services and by providing faster execution services.
- 160. In particular, trading platforms have been keen to avail themselves of the MiFID pre-trade transparency waivers and many have been innovative in developing proposals which they felt responded to user demands and were within the terms of pre-trade transparency waivers. Many issues were raised in the responses to the Call for Evidence, ranging from interpretation issues to potentially undesirable impacts on innovation and unlevel playing field between various trade execution venues. CESR is already taking steps to address some of these concerns. For instance, a process for considering future applications for waivers has been implemented and a review of all pre-trade transparency waivers will be undertaken starting in the latter half of this year.
- 161. MiFID recognises the importance of post-trade transparency for price formation, the efficient functioning of the markets, the fulfilment of best execution and the mitigation of the potential negative impact of market fragmentation. A number of concerns were raised in the responses to the Call for Evidence with respect to the post-trade transparency regime which requires further consideration by CESR. CESR recognises that there is not a single solution to the various issues raised, but that a number of initiatives may help improve the quality and consolidation of post-trade transparency data.



- 162. Accordingly, CESR welcomes industry initiatives to foster the publication of reports for large trades once a firm is no longer at risk even if it is before the expiry of the full MiFID delay permissible for a trade for that particular size, pending the Commission's review of the MiFID deferred publication regime. In order to prepare to contribute to the Commission review of the MiFID deferred publication regime, CESR will undertake work in the second half of this year, focusing in particular on whether qualifying sizes for trades eligible for deferred publication and the delays provided remain appropriate.
- 163. CESR acknowledges the importance of having trade information of sufficient quality and is concerned about the deterioration which has followed MiFID implementation. Work is already underway within CESR which may help bring greater clarity about who should be publishing a trade and what information should be published. For example, CESR is currently working on defining 'execution of a transaction' for transaction reporting purposes. The result of this work could inform the future work by CESR on clarifying what should be published and by whom. Also, in view of the feedback received from market data vendors, CESR considers whether it would be helpful to revisit the CESR Level 3 guidelines on publication and consolidation of MiFID market transparency data. Recognising that some of the deficiencies may be linked to less than satisfactory compliance with MiFID transparency obligations, CESR Members have agreed to raise data quality issues with their investment firms and take supervisory action as appropriate.
- 164. Concerns over data quality were also raised with respect to the CESR MiFID database. In this respect, CESR has been working on improving the functioning of the database through consultation of market participants in order to allow the smooth running of the database, facilitate updates and ensure a clear presentation of the data for market participants. CESR has implemented a detailed procedure to be applied by competent authorities to update the information provided in the CESR MiFID database. CESR also decided to establish a list of national contacts in CESR Members, to which questions pertaining to the content of specific entries should be sent. The relevant competent authorities are working on improving the content of the information included in the MiFID database in order to improve its accuracy and avoid errors in the information provided. In addition, CESR has agreed to set up a system to monitor the number as well as the nature of questions raised by external stakeholders. This will enable CESR to better assess the nature and extent of problems and make appropriate recommendations if required.
- 165. In the responses to the Call for Evidence, some stakeholders expressed concerns over the cost of market data. In its report to the Commission, the European Securities Markets Expert Group (ESME) concluded that there is no specific evidence which would support recent complaints of an overall and substantial increase of data fees since the introduction of MiFID. CESR intends to monitor developments with respect to the cost of data, for which an appropriate process will be developed. CESR also intends to monitor developments with respect to consolidation. It recognises that steps taken to improve the quality of transparency information should help facilitate the consolidation of equity market data and will take the outcome of the work on consolidation into account in any review of the CESR Level 3 guidelines on the publication and consolidation of MiFID market transparency data.
- 166. Finally, MiFID aimed to develop competition and greater efficiency of equity trading while maintaining investor protection. This greater competition is raising concerns among trading platforms, by regulated markets vis-à-vis MTFs, and by regulated markets and MTFs vis-à-vis investment firms' OTC activities. Beyond the commercial interests underpinning the concerns expressed, it is important to be and remain aware of the challenges raised by the still recent introduction of the MiFID framework governing competition in equity trading so that action can be taken or recommendations made to address issues identified. A review of how trading functionality is developing across the whole market could be a useful start of further consideration of the still blurring distinction between broker activities and the operation of a trading platform. The significance reached by some MTFs may lead to reconsider some potential differences in regulatory requirements for MTFs and regulated markets.



Annex 1: Non-confidential responses to the Call for Evidence:
AFG
AMAFI
APCIMS
Association of British Insurers
Association of Members of the Athens Exchange
Bloomberg
BME – Spanish Exchanges
Borsa Italiana
Börse Berlin Equiduct
Börse Düsseldorf AG
Deutsche Börse
EFAMA
ESBG
Euroclear
European Association of Co-operative Banks
European Banking Federation
European Issuers
FESE
Goldman Sachs International
Hessen Ministerium fur Wirtschaft, Verkehr and Landsentiwicklung
Instinet Europe Limited
Intesa Sanpaolo
Investment Management Association
Italian Banking Association
Joint response by LIBA, ASSOSIM, BBA, BWF, DSDA, FFFS, IFSA, NSDA, SIFMA, SSDA
Legal & General Investment Management Ltd
London Stock Exchange



Markit

NAPF

 ${\it NASDAQ~OMX}$

NYSE Euronext

The Share Centre Limited

Thomson Reuters

Union of listed companies

Zentraler Kreditausschuss (ZKA)



Annex 2: Bibliography

Directive 2004/39/EC of the European Parliament and of the Council (21 April 2004) - MiFID Commission Regulation (EC) No 1287/2006 (10 August 2006) — MiFID Implementing Regulation Reports:

European Commission, Emerging trends in the European equity markets (4 November 2008)

European Securities Markets Expert Group (ESME), Fact finding regarding the availability of post-trade data in equities in the EU (March 2009)

PriceWaterhouseCoopers, Study on Liquidity in relation to the Markets in Financial Instruments Directive, Final Report (January 2009)

Data:

CESR MiFID Database

Markit BOAT, Quarterly SI Reports

Thomson Reuters, MiFID Market Share Reports

NYSE Euronext, average hit size