FEDERATION OF EUROPEAN SECURITIES EXCHANGES

FESE Response to IOSCO consultation on Regulatory Issues Raised by the Impact of Technological Changes on Market integrity and Efficiency – CR02/11

I. Introduction

We thank IOSCO for the opportunity to respond to the current Consultation Paper. The Federation of European Securities Exchanges (FESE) represents 46 exchanges active in equities, bonds, derivatives and commodities through 21 full members from 30 countries, as well as 7 observer members from European emerging markets. FESE is a keen defender of cross-border competition and many of its members have become multi-jurisdictional exchanges, providing market access across multiple investor communities. FESE members operate Regulated Markets (RMs), which provide both institutional and retail investors with transparent and neutral price-formation. In line with the interests of the broader market, securities admitted to trading on our markets have to comply with stringent initial and ongoing disclosure requirements and accounting and auditing standards imposed by EU laws.

FESE members are happy to contribute to IOSCO's consultation. FESE supports efficient, fair, orderly and transparent financial markets that meet the needs of well protected and informed investors and provide a source for companies whereto raise capital. In Europe, capital markets have greatly changed since the implementation of the Markets in Financial Instruments Directive (MiFID). This has resulted in more competition among trading venues as new types of them (Multilateral Trading Facilities, MTFs, and Systematic Internalisers, SIs) now compete with incumbent exchanges. Competition facilitates greater efficiency and pushes technological innovation. FESE members support both global and European wide competition on a level playing field as a means of achieving the most significant efficiency and reductions in trading costs.

Significant technology advancements have been implemented by trading venues, in a bid to provide the investor with improved access to and interaction with the market. One of them is high frequency trading (HFT) which allows more accurate, granular and faster pricing of securities. HFT can be seen as bringing liquidity to the markets and leading to higher long term efficiency and increasing transaction flow. As pointed out in the consultation report, there is no clear evidence of consistent negative effects of HFT. Following the US Flash Crash – the roots of which are, for various reasons, specific to the US – the focus has shifted to HFT and the potentially detrimental effects it may have on already volatile markets. In this regard, FESE welcomes this opportunity to outline the provisions taken by its members to foresee such problems and the tools that they have put in place to safeguard against this.

II. General Remarks

In addition to our responses to the different questions outlined below, and in an equally constructive spirit, we would like to note the following observations we have about the CP in general that go beyond specific issues:

II.i. Market fragmentation and dark liquidity

Competition has brought about high fragmentation in European capital markets. Following the introduction of many new trading platforms, MTFs and SIs, there has been a significant growth of dark trading in European equity markets. Under MiFID's transparency regime, dark liquidity pools have emerged for those investors who wish to execute large trades without facing a potential adverse market impact. However, a large share of this dark trading is taking place outside MiFID trading venues. OTC was intended to capture those trades that were above standard market size, ad-hoc and irregular, and carried out on a non-systematic basis. There is no consensus on the current level of liquidity in the OTC space; however, the best available figure for trades that are reported as OTC is 37.8% of all European equity trading[1]. The uncertainty over what is contained within this figure (genuine trades as well as duplicate, technical trades, etc) is unacceptable. OTC trading is exempt from most MiFID rules that apply to RMs, MTFs and SIs, namely transparency obligations and market surveillance, which raises concerns about the effect this level of trading has on price formation in not only lit markets, but also properly regulated dark trading venues. Failure to fully implement the correct trading venue rules will see a significant number of venues in Europe, such as Broker Crossing Networks/Broker-Dealer Platforms, which are not regulated in the same manner and to the same standards as trading venues. This unexpected increased fragmentation will no doubt have a negative effect on price formation. The fact that not all trading platforms are regulated in the same way also needs to be taken into account when designing policies to address the potential risks of HFT, which, in different forms, takes place in all venues, including OTC.

II.ii. Direct electronic access

Direct electronic access itself does not raise regulatory concerns provided there is pre-trade risk management, the sponsor retains the responsibility of trades, the sponsored access is given upon exactly the same terms and conditions as any other type of access to market participants and adequate market surveillance is in place.

II.iii. Co-location

Most Regulated Markets (RMS) and MTFs which offer co-location services already provide a transparent and non-discriminatory service which is available to any member wishing to use it and have the commercial business case to do so. This is part of the general requirements placed on RMs and MTFs.

II.iv. Tick sizes

HFT is not the main driver for the reduction of tick sizes, but rather one of the main drivers. Competing in terms of tick sizes is widely agreed as being damaging to the stability of the market, as the short-term effects of attracting higher volumes by undercutting tick sizes can be quickly mimicked by others, with the end result of overall reduced levels of liquidity. There is clear consensus on the most appropriate/beneficial outcome and each market has to deal with the specifics within its own product base.

FESE, LIBA (now AFME) and the MTFs co-operated during 2009 to agree a harmonised tick-size approach to be used in most equity markets across Europe. On 30th June 2009 an implementation timescale was agreed to deliver this harmonised service. Currently the co-operative agreement amongst the venues is proving successful and further revisions (with the aim of making the agreement more formal and stable) are being investigated in a co-operative manner. Therefore, we currently believe that this issue should be left to market forces.

II.v. Fee structures

The key elements of fee structures should be that they are transparent, open to all users of the venue on equal or equivalent terms and are unambiguous. One key development in fee structures used by trading platforms in Europe is the introduction of incentives for the provision of liquidity. Examples are the maker-taker-schemes of various MTFs. Furthermore, another key development is an order-based pricing model instead of an execution-based pricing model. In general, pricing has become more differentiated. Blue chips typically receive the most attention, thus fees in general are being reduced for more liquid securities where fragmentation pressure is more intense. There also seems to be a typical trend towards giving scale discounts based on usage.

[1] CESR consultation paper Equity Markets (CESR-10/394)

Please find below a table containing the perceived benefits and downsides of the various fee structures:

Fee Structure	Benefits	Downsides
Maker-Taker Schemes	Credits for liquidity provision cause lower spreads	• Liquidity takers which benefit from higher spreads do have to pay higher taker fees in order to finance the credits given to those providing liquidity. As a consequence, the total impact for a firm acting in both capacities should be neutral. In practice, however, "smart order routing" (SOR) might only incorporate the bid/ask prices and not the (taker) fees and in this case a maker-taker-scheme would hide the total execution costs but this impact would be dependent on the quality of the SOR functionality.
Order-based fees	Customers / members benefit from an ex ante-predictability; there is no impact of unexpected partial executions on the transaction fees	
Scale discounts	Larger usage trading firms benefit from lower transaction fees incentivizing scale	• The scale discounts trigger at varying levels depending on volume. Beneficiaries of such discounts use their market power to put pressure on trading venues / venue operators. In the final consequence, providing such discounts can result in a concentration of order flow which may further increase their market power.

Any decision to connect to a trading platform will be based on a business case which comprises many aspects. The most important aspects are likelihood and quality of execution potential, order management capabilities, depth of trading firms in the respective market and complexity of interfaces / processes. Post-trade costs are equally important. Generically fee structures seem to be less important – as long as they do not exceed a certain (subjective / business case-related) threshold with regards to fee levels, transparency or complexity.

Fees and fee structures which are uniformly valid for all trading members should be made public to all existing and potential market participants. This increases transparency in European trading. All FESE members make their tariff structures public in line with the Code of Conduct commitments (which is a self-regulatory regime adopted in 2006).

Recent market developments with greater competition and, therefore, greater fragmentation of liquidity and successfully implemented price transparency measures brought about by the Code of Conduct demonstrates that **there is no systemic market inefficiency caused by fee structures**. Hence, no regulatory action is needed. However, a strong recommendation is to carefully observe and analyse increasing fragmentation and the lack of market transparency (e.g. unregulated dark pools) causing higher implicit transaction costs (bid prices, ask prices) for investors.

II.vi. High Frequency Trading

FESE agrees with IOSCO’s interpretation of HFT as not a trading strategy in itself, but as a technology that encompasses a variety of trading strategies.

HFT allows actors with the capacity and commercial incentive to interact in markets within extremely fast timescales. The potential to interact in such timescales on RMs and MTFs is transparent and usually available to any participant with the technological and financial capacity who chooses to utilise this type of business model. This is a product both of technological advance and financial regulation and is not hugely dissimilar to the historical concept of market makers being located on the floor of an exchange in open outcry to enable them to be close to information dissemination and be able to react in real time to market opportunities and movements.

It is important to note that in Europe, a large portion of existing RMs and MTFs already have risk controls (such as circuit breakers and stress testing) in place. This is displayed in the table in response to question 4.

FESE agrees that there is nothing intrinsic to HFT that leads to market abuse and that we have not seen any material evidence to imply this is systematically the case. Like any other trading activity, trading strategies using HFT may involve market abuse when not monitored properly and managed through the relevant controls in place.

II.vii. HFT in dark trading venues and the OTC space

Much of the current policy debate on HFT is focused on the lit markets and, when it refers to dark venues, it tends to focus on regulated dark trading venues. Less considered is the issue of interaction of HFT in the OTC space. By contrast, some recent researchers have suggested that HFT exists in the OTC space, probably in particular in the platforms known as Broker Crossing Networks (BCNs) in Europe which are currently regulated as OTC[2]. Whether the HFT trading in the OTC space has the same trading strategies as in RMs or MTFs may not yet be known (due to the limited public information about OTC trading in Europe); however, it is known that the proprietary desks of the crossing system providers often act as market makers applying strategies that are largely comparable to HFT market making on lit markets. As a result, according to one study3, '[a]ny assessment of HFT based strategies has to take a functional rather than an institutional approach. HFT is applied by different groups of market players from investment banks to specialized boutiques. Any regulatory approach focusing on specialized players alone risks (i) to undermine a level playing field and (ii) exclude a relevant part of HFT strategies.' We support this recommendation.

II.viii Regulatory tools

FESE agrees that regulators should look at the issue of naked sponsored access in order to ensure that the correct level of responsibility is adhered to by intermediaries. Until this issue has been solved, FESE is strongly against naked sponsored access.

[2] Peter Gomber and Axel Pierron (2010) MiFID: Spirit and Reality of a European Financial Markets Directive. Please see : http://www.fese.be/_mdb/news/MiFID_report_Final%20(3).pdf

[3] Peter Gomber (2011) 'High Frequency Trading'. Please see : http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1858626

III. Response to Consultation Questions

Q1. What impact have the technological developments in the markets in recent years had on your own trading? Has it encouraged, discouraged or had no impact on your willingness to participate on the lit markets, and how does this differ between asset classes and/or instruments?

N/A. FESE members do not participate in the markets they operate.

Q2. What are your views on the suggestion that proprietary trading firms (including HFT firms) that are not currently subject to registration/authorisation by a regulator should be required to obtain such a registration/authorisation? Are there specific regulatory requirements you believe such firms should face?

To what extent do your answers differ if the proprietary trading firm accesses the market as the customer of an intermediary firm through DEA (i.e. under that intermediary's trading rules/codes) rather than as a direct member of the market itself?

While some of our members consider such an authorisation unnecessary (among other reasons because the direct member, which is regulated, must bear the risk), FESE believes it should be up to HFT firms to respond to the question on authorisation.

With regards to Direct Electronic Access (DEA), FESE is against naked access because of major concerns with respect to risk management controls.

Q3. What recommendations, if any, would you propose to strengthen the regulatory requirements around pre- and post-trade risk controls? In particular, what measures, if any, do you think regulators should introduce that relate specifically to the use of and risks posed by algorithmic trading and/or HFT?

With regard to Sponsored Access (SA), liability for damages, manipulative trading practices, errors, etc., must be clearly regulated to provide clarity on who is held liable (the sponsoring firm or the client using SA). Clearly, in the current environment, this can only follow contractual process flows as the trading venue only has a legal relationship with the sponsoring firm, not the client using SA, and this is the only recourse for progressing liabilities. Without changes in those relationships the sponsoring firm is taking on additional liabilities. Therefore, the sponsoring firm must ensure that the firm is able to monitor and is equipped to bear the risks associated with offering sponsored access to its clients. Naked sponsored access would allow non-members to place orders with an execution venue without pre-trade risk controls by a trading member, we believe that this should not be possible in Europe under MiFID.

We would like to stress the importance of having risk tools in place that are at the trading member and, where appropriate, at venue level. Venues have risk management tools such as , technical and capacity throttles or maximum order quantities etc.

Q4. To what extent do you believe the use of trading control mechanisms such as circuit breakers and limit-up/limit-down systems by trading venues should be mandated? If you believe they should be mandated, should venue operators be permitted to design their own controls or should they be harmonised/coordinated across venues (including between interrelated instruments such as a derivative and its underlying)?

As stated in the above General Remarks, a large portion of existing RMs and MTFs already have such risk controls in place (such as circuit breakers and stress testing). As these control mechanisms are already in place, we do not feel the need to mandate venues to use them. RMs and MTFs understand that in order to ensure investor confidence and an efficient market place, a well functioning control system is vital, especially in the wake of the US Flash Crash. Controls should not be harmonised across trading venues, as this would cause difficulties and a "one-size-fits-all" approach may not be appropriate for all products and circumstances. Instead each venue should be allowed to implement the trading controls that best suits their market and operating system.

Please see below the table summarising the current risk controls in place in some trading venues:

Name of trading venue(s)	Type of trading venues		Circuit Breakers		Stress Testing	
	RM	MTF	RM	MTF	RM	MTF
Athens Stock Exchange (ATHEX-ASE) operated by Athens Exchange S.A	Yes	Yes	YES	No	Yes	No
Bolsas y Mercados Españoles	Yes	Yes	Yes	Yes	Yes	Yes
Börse Berlin Equiduct	Yes	Yes	Yes	Yes	Yes	Yes
Bulgarian Stock Exchange	Yes	-	No	-	No	-
Budapest Stock Exchange	Yes	-	Yes	-	No	-
Cyprus Stock Exchange	Yes	Yes	No	No	No	No
Deutsche Boerse: ▪ Frankfurter Wertpapierbörse ▪ Eurex Deutschland	Yes	Yes	Yes	Yes	Yes	Yes
Irish Stock Exchange	Yes	Yes	Yes	Yes	Yes	Yes
Istanbul Stock Exchange	Yes	-	Yes	-	Yes	-
Istanbul SE: Automated Trading System (OTASS) [in the Bonds and Bills Market]	Yes	-	No	-	No	-
Ljubljana Stock Exchange –Trading on Xetra® System (Xetra® backend Vienna)	Yes	-	Yes	-	No	-
Luxembourg Stock Exchange Euro MTF	Yes	Yes	Yes	Yes	Yes	Yes
Malta Stock Exchange	Yes	-	Yes	-	No	-
NASDAQ OMX: ▪ NASDAQ OMX Nordic ▪ First North	Yes	Yes	Yes	Yes	Yes	Yes
NYSE Euronext	Yes	Yes	Yes	Yes	Yes	Yes
Oslo Børs: Oslo Axess, Oslo ABM, Oslo Connect	Yes	Yes	Yes	No	No	No
SIX Swiss Exchange	Yes	-	Yes	-	YES	-
Warsaw Stock Exchange	Yes	-	Yes	-	No	-
Wiener Boerse: Xetra Vienna	Yes	Yes	Yes	Yes	No	No

Q5. To what extent do you believe market maker schemes offered by trading venues should be subject to mandatory minimum criteria? Should the criteria be determined by the trading venue alone? To what extent do you agree with the suggestion that the use of stub quotes should be prohibited?

Market Making regimes tend to offer the market makers enhanced tariffs or access in return for them undertaking the obligations; the design of such schemes should be left to the markets to determine the most appropriate solutions to ensure market efficiency, liquidity and necessary participation.

Given the definition of HFT is a subset of algorithmic trading and this activity is not wholly market maker driven, it may not be appropriate to mandate obligations on HFT traders generically. If these were to apply to HFT it may result in unintended consequences.

Market makers are a special kind of participant and are beneficial to liquidity. Mandating ongoing liquidity provisions would hurt activity whereas incentives would be the better route. These incentives are already in place by many exchanges in the form of fee discounts. Moreover, market maker schemes provide a differentiating factor for trading venues, and are carefully calibrated to reflect the nature of the market. We do not support the introduction of mandatory minimum criteria.

Q6. Do you have suggestions for improvements to regulators' surveillance capabilities with respect to the markets and modern trading techniques? Please elaborate.

Who should bear the cost of investing in such capabilities and the cost of operating and supervising the markets in order to ensure fairness among market participants? Please elaborate.

In principle, the concept of greater co-operation would provide enhanced stability to the markets and increase the potential that abuses would be identified and appropriate action taken. However, as fragmentation is now so widespread and the organisations in question are in direct competition with each other, it is challenging to ascertain how this concept could work in practise without a "lead" entity and strict and transparent engagement criteria. It would appear sensible that the "home market" or "listing venue" take the lead in this respect; clearing the work in conjunction with the relevant prudential regulator. As an example of co-operation the majority of RMs, who are members of FESE, already have in place a formal methodology to enable us to communicate with the relevant experts on trading on disruptions or halts.

In the case of cross-border market abuse, the European Securities and Markets Authority (ESMA) should be given greater monitoring and enforcement powers to ensure venues are effectively co-operating.

Q7. What do you perceive as the major causes of settlement indiscipline and settlement failures? What steps, if any, do you believe regulators should take to address these causes?

Contrary to other jurisdictions, EU Regulated Markets and other market infrastructures have already had in place for a number of years different systems for settlement discipline. These range from penalties for late matching, penalties for failed settlement and buy-in regimes which all strive to maximise settlement efficiency and ensure the investor receives delivery of the product on time. This has ensured that settlement efficiency on intended settlement date in most EU countries is currently at levels close to 100%. We are not aware of similar systems or rates in the OTC markets.

However, these systems are not fully harmonised and for this reason an industry group was formed by the European Commission at the end of 2009: the Harmonisation of Settlement Cycles Working Group (HSCWG), whose aim is to make European Financial Markets more competitive by harmonising the time it takes for a transaction to be settled (settlement cycles) which in most of Europe is three days after the transaction is executed (T+3), although in Germany, Slovenia and Bulgaria is T+2 (the US and Japan are also on T+3 and are currently reflecting upon a reduction to T+2 following the European example). A sub-group of the HSCWG also looked at the way to harmonise Buy-In and Penalty regimes in Europe (the so-called Settlement Discipline regimes). The group concluded that there is a role for legislation setting out certain high level rules and minimum requirements with regard to settlement failures.

Settlement indiscipline and failures can be due to many different reasons: miscommunication between parties, operational disruptions, daisy chain (i.e. one participant fails to deliver because he was waiting to receive securities from another participant that also failed to deliver), lack of cash to deliver, naked short selling, etc.

In light of the above, we believe that regulators are already taking the necessary steps to address settlement indiscipline and failures in the context of the European Commission legislative proposal on CSDs. Hence, we do not believe that additional steps are needed at this point.

Q8. Have the appropriate steps been taken to limit or manage conflicts of interest that arise where an investment firm simultaneously conducts client-serving activities and proprietary trading or a trading participant is also a shareholder in a venue on which it trades? If you believe conflicts management is inadequate, please explain how this manifests itself and any recommendation you have for how conflicts management could be improved.

There should be independent scrutiny of broker matching algorithms/engines in order to avoid/mitigate any potential conflict of interest, especially as users of these services cannot effectively scrutinise these. Please also see our answer to Q9.

Q9. Do you think existing laws and rules on market abuse and disorderly trading cover computer generated orders and are relevant in today's market environment?

The European Commission is currently undertaking a review of the Market Abuse Directive (MAD). FESE believes that this review is very timely in order to bring the MAD rules in line with current trading environment. In particular, we recommend the following improvements:

- There needs to be a level playing field and cooperation across all execution venues with potentially Level 3 definitions covering issues such as alerts, data standards, and information sharing.
- Overall, the new MAD regime should ensure an effective oversight of all activity in the same product (a stock could be traded simultaneously on the home RM and a number of MTFs and OTC spaces). Pan-European surveillance can only happen with greater cooperation among the venues and between the venues and the supervisors.

Q10. Are there any strategies employed by HFT firms that raise particular concerns? If so, how would you recommend that regulators address them?

FESE has no evidence that any specific strategies employed by HFT firms which would pose great risks or would harm market efficiency. The only risk is a computer glitch or a so-called "fat finger" syndrome, e.g. programs running wild sending thousands of orders to the market per second , or user input error. This may reduce overall latency and possibly halt markets temporarily with negative consequences for price discovery. Flipping and layering are also potential risks. Market abuse should not be considered only in the context of HFT, but for all participants when discussing regulatory issues.

Q11. Should charges or fees be imposed on messages, cancellations or high order-to-trade ratios? If so, how should the fees or charges be determined and on what basis?

Trading venues should retain the flexibility to price services which best reflect the usage of the resources and consume capacity. Any such structures should not be imposed by regulators. It should be up to the market operator to charge per message or on the level of order-to-trade ratio as restricting market operators in their freedom to compete by imposing a minimum level of fees is not beneficial to the market. Market operators already have strong incentives to manage system load adequately.

Q12. Should market operators be required to make their co-location services available on a fair and

non-discriminatory basis?

According to MiFID, RMs and MTFs are required “to establish and maintain transparent rules, based on objective criteria, governing access to its facilities”. With regards to the execution system, both RMs and MTFs “are obliged to have transparent and nondiscretionary rules and procedures that provide for fair and orderly trading and establish objective criteria for the efficient execution of orders”. This means that RMs and MTFs are not allowed to provide ‘unfair advantages’ to any market participant, including HFTs. As long as co-location is available to all members on a similar basis, this does not cause any issues that we can identify.

Q13. Should market operators be required to provide testing environments to enable participants in stress test their algorithms? If so, what kind of minimum requirements are reasonable?

It is not necessary to regulate stress testing of trading venues as regulation and competitive pressure ensures that trading venues provide the necessary investments into their infrastructure and ensure it remains robust.

RM’s usually offer, and in some case mandate, testing for new entrants to their venues or when existing members have to adapt or change technology to connect & communicate with the venue. As changes to algorithms may not affect such communication as the HFT firm must ensure its systems and controls are adequate and fulfil the rules of the venue they are accessing. Such interaction on a voluntary nature should be accommodated were possible. In any case, this should not be mandatory but left to the market operators.