European Principal Traders Association

1. Positions on key MiFID 2 provisions

1. **We support fair and non-discriminatory access to trading venues, the regulation of all direct market participants, transparent markets and prudent risk management. We support the extension of the scope of the MiFID authorisation regime and firm-level controls. However, we see that much more can be done in areas such as best execution, access to electronic platforms, and pre and post-trade transparency for all financial instruments.**

2. **We support the proposed changes to Article 2 MiFID 2. We support the proposed Article 4(30) MiFID 2 definition of "algorithmic trading." We do not believe that 'high frequency trading' can or should be defined. The proposed Article 4(30a) definition adds nothing to the legislation.**

3. **We oppose legislatively mandated continuous quoting obligations which are purely based on the nature of participants rather than on incentive schemes. The notion that this would avoid flash crashes, such as occurred in the US, is illogical. However, should continuous quoting obligations be prescribed, these should apply to firms choosing to be market makers. Entering into a market making agreement with a trading venue must remain a voluntary activity as it requires the market maker to take on specific market risk. Any continuous quoting obligation must reflect and be consistent with prudent risk management.**

4. **We believe that the provision of direct market access to a trading venue should be a regulated activity. We are concerned that the use of definitions in amendments to Article 17(4) MiFID 2 could confuse appropriate distinctions between "naked" sponsored access and sponsored access. While we support a prohibition on so-called "naked" sponsored access to a trading venue, we believe that sponsored access that fully complies with the ESMA Guidelines should remain permissible.**

5. **We oppose any 'minimum order resting time' as unworkable, irreconcilable with a continuous quoting obligation and contrary to prudent risk management.**

6. **We support order-to-trade ratios (OTTRs) where carefully calibrated based on historical data to the financial instrument in question. For this reason, we caution against setting ranges for OTTRs in the MiFID 2 text. We believe that ESMA, working with national competent authorities, has the technical expertise required to set well calibrated OTTRs.**

7. **We oppose so-called and generally applied 'cancellation fees' as harmful to liquidity, irreconcilable with a continuous quoting obligation or any OTTR and contrary to prudent risk management. These commercially driven fees would increase the notional cost of trading for all market participants and will only serve to generate additional revenue for exchanges.**

8. **We support a clear and expansive third-country regime for the MiFID 2 legislation. We believe that investment firms and market infrastructure subject to equivalent supervision in third countries should be able to provide investment services without additional restriction across the EU and EEA. We oppose unnecessary and disruptive 'gold plating' and pre-empting of legislation by individual Member State governments.**

9. **We strongly support the G20 commitment to bring in "all OTC standardised derivatives … on exchanges or electronic platforms."**

10. **We encourage the institutions to be much more ambitious on best execution – a legacy failure of MiFID 1. We support the amendment to Article 27(1) MiFID 2 obliging investment firms to take all necessary measures to deliver best execution. We support amendments to Article 27(3) MiFID 2 to facilitate best execution away from regulated markets and MTFs.**

11. **We believe that the pre and post-trade transparency requirements of Articles 3-10 MiFIR should be broadly applied. We support 'Open Access' provisions to encourage appropriate competition between CCPs and deliver savings for market participants. We acknowledge the risks of fragmentation and systemic contagion but believe that legislative provisions are necessary to safeguard market participant interests.**

Article 4(30) MiFID 2 – Definition of "algorithmic trading"

FIA EPTA believes that the definition of "algorithmic trading" as proposed by the European Commission in Article 4(30) is appropriate and sufficient. We see no need for an additional definition of "high frequency trading" nor do we believe that any such definition is feasible as:

- there is no clear distinction between algorithmic trading and high frequency trading;
- all attempted definitions have described the frequency of the activity and not the activity itself; and
- changes to market structure will make any definition stale in the short term.

High frequency trading is merely a new means to execute age-old strategies, such as arbitrage or market making. There have been numerous definitions proposed by academics, regulators and traders to date, which capture a varying range of activities. These definitions are simultaneously under- and over-inclusive and FIA EPTA agrees with ESMA in its view that distinguishing algorithmic trading and high-frequency trading is neither practical nor desirable for the application of European Union law.[1]

Article 17 MiFID 2 – Algorithmic Trading

Article 17(1) – organisational requirements

FIA EPTA supports the European Commission's proposed provisions on organisational requirements for investment firms engaging in algorithmic trading. However, it is impossible to devise or operate a system that automatically and in every case prevents any attempt to commit market abuse. We advocate sensible amendments to this provision to reflect this reality. Specifically, FIA EPTA believes the provision should be amended in line with the ESMA Guidelines on Highly Automated Trading, which require investment firms to have "policies and procedures in place to minimise the risk that their automated trading activity gives rise to market abuse."[2]

Article 17(2) – notifications to national competent authorities

FIA EPTA believes that effective market supervision requires transparency. We support the European Commission's proposed provisions that firms engaging in algorithmic trading should share upon request relevant data with national competent authorities to facilitate effective market supervision. However, we strongly urge that due regard be given to the commercial sensitivity of certain data and caution against rules that add disproportionate cost and/or over-burden national competent authorities with irrelevant data.

Article 17(3) – a continuous quoting obligation on market makers

FIA EPTA opposes a legislatively mandated continuous quoting obligation. However, if a continuous quoting obligation is to be prescribed, we believe this obligation should apply only to investment firms that have voluntarily entered into a formal market making agreement with a trading venue.

Consistent with these views, we support the amendment to Article 17(3) proposed by the European Parliament that would permit market making agreements to specify derogations from continuous quoting. We further support the amendments to this provision proposed by the Council of Ministers, which would require that any market making strategy with a continuous quoting obligation take account of sound operational, commercial and risk management practices, as well as the specific characteristics of the relevant financial instruments and markets. We believe that such amendments are essential for a workable and prudent continuous quoting obligation undertaken within a robust and sound risk management framework. In addition, we would like to note that even though the Commission may believe

[1] In its Final Report on "Guidelines on systems and controls in an automated trading environment for trading platforms, investment firms and competent authorities" [Link], ESMA states that it "maintained its broad definition of "trading algorithm" in light of the responses received. It believes that such an approach is necessary to avoid regulatory arbitrage but recognises that the application of the guidelines to any algorithm will vary depending on the nature of the individual algorithm." See ESMA: "Final Report - Guidelines on systems and controls in an automated trading environment for trading platforms, investment firms and competent authorities" [Link],

[2] *Ibid.* Guideline 6, page 18.

that continuous quoting obligations will prevent a flash crash such as occurred in the US, the SEC/CFTC has clearly not followed this logic after their analysis of the events on May 6th 2010.

[Please find further information on this topic on p.9 of this paper.]

Article 17(4) – direct electronic access

FIA EPTA welcomes the European Commission's proposal to prohibit unregulated participants from providing direct electronic access to trading venues. We also believe that effective systems and risk controls must not necessarily be applied by firms providing direct electronic access, but believe that these systems and controls can be applied with equal effectiveness at the investment firm level.

However, we are concerned by the use of definitions in this provision and associated amendments. So-called "naked" sponsored access should be clearly distinguished from other types of sponsored access where appropriate controls are applied either at the level of the sponsored access provider or the exchange itself. Article17(4) should permit investment firms with suitable permissions and controls, and complying fully with the ESMA Guidelines on Automated Trading, to use sponsored access to a trading venue. FIA EPTA fully supports a ban on the provision or use of "naked" sponsored access to trading venues.

Article 17(6) – delegation of powers

FIA EPTA supports the amendment to Article 17(6) proposed by the Council of Ministers specifying implementation of the Article 17 provisions via regulatory technical standards. We believe that regulatory technical standards, proposed and drafted by ESMA and adopted by the Commission, are more appropriate than delegated acts for these detailed and technically-complex provisions. We believe that ESMA, working with national competent authorities, has the technical expertise required for these implementing measures.

Article 51 MiFID 2 – System resilience, circuit breakers and electronic trading

Article 51(1) – systems resilience

FIA EPTA supports the proposed requirements in Article 51(1) for regulated markets to have effective systems in place that are resilient and capable of handling large order and message volumes.

Article 51(1a) – market-making schemes

FIA EPTA strongly supports the Article 51(1a) amendments on market-making schemes proposed by both the Council of Ministers and the European Parliament. Such agreements are essential for a workable continuous quoting obligation. We believe that trading venues should offer schemes in all financial instruments and should be free to compete on the terms and conditions of market-making schemes. Article 51(1a) should be no more prescriptive with respect to the content of market-making schemes.

Article 51(1b) – minimum order resting time

FIA EPTA opposes the 500 millisecond minimum order resting time (MORT) proposed by the European Parliament. We believe that any MORT would:

- greatly increase the cost and risk of passive quoting and have a hugely detrimental effect on liquidity on regulated markets;
- incentivise aggressive, liquidity taking trading strategies and disadvantage retail investors;
- increase intra-day and overall volatility of financial instruments traded on regulated markets;
- drive transactions away from regulated markets contrary to MiFID's stated policy objectives;
- isolate regulated markets in Europe from all other third country markets and market participants; and
- create an unlevel playing field between posters and takers.

We further believe that any MORT would be fundamentally irreconcilable with the Article 17(3) continuous quoting obligation. A MORT would prevent an investment firm engaging in algorithmic trading from

managing its trading risk by controlling how and when orders are placed and modified. Consequently, prudent market making would be impossible.

[Please find further information on this topic on page 13 of this paper.]

Article 51(2) – circuit breakers

FIA EPTA supports the requirements in Article 51(2) for regulated markets and MTFs to have order filters and volatility controls in place to pause trading when there is a significant price shift as well as having clear and objective trade cancellation and modification rules.

Article 51(3) – order-to-trade ratios

FIA EPTA supports well-calibrated order-to-trade ratios (OTTRs) and notes the positive effects OTTRs have had across trading venues in Europe in recent years. We caution that OTTRs must be set on a per instrument basis in order to avoid unintentional effects. We strongly oppose any "one-size-fits-all" ratio because we believe any such ratio would have a very detrimental effect on liquidity and market efficiency generally. We believe that operators of trading venues, in consultation with their national competent authorities, are best placed to set OTTRs that reflect the characteristics of a particular financial instrument and capabilities of that venue. We support the amendment of the European Parliament that any ratio set by trading venues reflect and preserve the liquidity of the relevant financial instrument.

A one-size fits all approach to OTTRs should be avoided as this would have considerable detrimental effects for liquidity and the efficiency of markets. We believe that designated market-makers subject to the Article 17(3) continuous quoting obligation must be exempted from OTTRs. This will be necessary to ensure that market-makers can comply with those obligations and can maintain appropriate liquidity in a given financial instrument.

[Please find further information on page 11 of this paper.]

Article 51(5a) – cancellation and system capacity fees

FIA EPTA opposes mandatory fee structures that "impose a higher fee for placing an order that is subsequently cancelled than an order which is executed" (so-called "cancellation fees") as proposed by the European Parliament. We believe that such fee structures would:

- distort regular trading on regulated markets across all financial instruments admitted to trading;
- severely reduce liquidity by increasing the costs of providing passive liquidity, especially in exchange-traded derivatives;
- greatly incentivise OTC trading for affected financial instruments;
- drive trading on to third country markets, especially for execution of institutional and retail trades;
- encourage aggressive trading strategies that would exploit resulting inefficiencies; and
- prevent new regulated markets from competing with incumbent markets in Europe.

Because of the negative consequences of cancellation fees, no regulated market operator has introduced or sought to introduce such fee structures and we do not believe they would be in the interests of markets or market participants in Europe. Moreover, we believe that OTTRs, as set out in Article 51(3), are designed to achieve the same goals as cancellation fees and would have fewer negative consequences.

FIA EPTA opposes mandatory fee structures imposing a higher fee on members and others "operating a high-frequency trading strategy" (so-called "system capacity fees") as proposed by the European Parliament. We believe that any such requirement would distort competition between regulated markets and reward market operators that have failed to innovate or invest. Generally, regulated markets in Europe have performed well and have not suffered the technical failures of markets in other countries. We see no inordinate strain on market capacity in Europe and we see the proposed fee structures as unnecessary.

Article 51(5) – co-location facilities and market data services

FIA EPTA strongly supports the requirement that regulated markets have in place rules and fee structures for co-location services that are transparent, fair and non-discriminatory. However, we believe that this provision should be amended with an express reference to the provision of market

data services to co-location customers. We are greatly concerned by the practice of some market operators, particularly in charging co-location customers higher fees for ever faster delivery of market data once customers take up co-location services. We believe that an express reference to market data services is necessary for delegated acts or regulatory technical standards per Article 51(7)(e) to “ensure co-location services and fee structures are fair and non-discriminatory.”

Article 51(7) – delegation of powers

FIA EPTA supports the amendment to Article 51(7) proposed by the Council of Ministers specifying implementation of the Article 51 provisions via regulatory technical standards. We believe that regulatory technical standards, proposed and drafted by ESMA and adopted by the Commission, are more appropriate than delegated acts for these detailed and technically-complex provisions. We believe that ESMA, working with national competent authorities, has the technical expertise required for these implementing measures.

2. Positions on other MiFID 2 and MiFIR provisions

Articles 24–26 MiFIR – OTFs and the trading obligation

FIA EPTA strongly supports the G20 commitment to bring trading in "*all OTC standardised derivatives … on exchanges or electronic platforms"*. We believe that on-exchange and on-platform trading increases transparency for market participants, improves supervision of markets, and facilitates fair and non-discriminatory access to markets. To meet the G20 commitment, FIA EPTA strongly supports requiring fair and non-discriminatory access to OTFs trading derivative instruments.

We strongly support the proposed Article 24 MiFIR trading obligation. In particular, we support the Article 24(4) provision for recognising equivalent third country trading venues. However, we note the Commission's failure to implement similar third country provisions in the MiFID 1 legislation and the consequent difficulties for all derivative market participants in Europe. For this reason, we recommend that Article 24 be amended to specify a deadline by which the Commission will recognise equivalent third country trading venues.

FIA EPTA also supports the Council of Ministers' Article 25(2) amendment to require the use of automated systems for cleared derivatives transactions.

Finally, for the trading obligation to be effective, we believe that the regulatory technical standards foreseen in Article 26(1) must consider the frequency and size of trades over differing market conditions. We thereby support the respective amendments to Article 26(3)(a) proposed by the Council of Ministers.

Article 27 MiFID 2 – best execution

FIA EPTA strongly supports best execution as a strict legal requirement and based on the best price available at the time of execution. We believe that the European Commission's Article 27 MiFID 2 would do little to strengthen the best execution requirement and improve investor protection, especially for retail investors, we support the European Parliament's Article 27(1) amendment to require investment firms to take all *necessary* steps to obtain best execution.

In addition, given the best execution requirement, we see no reason why investment firms should be required to obtain the prior consent of their clients to an execution policy. This requirement can be an impediment to achieving best execution and we, therefore, support deleting the prior consent requirement from Article 27(4).

Articles 28-30 MiFIR – open access

FIA EPTA supports the principle of non-discriminatory access to market infrastructure. We also support increased competition in the provision of clearing services as benefits for market participants can be significant. We support the proposed Article 28 MiFIR provisions and believe that unfettered access to clearing is necessary to meet the EU's G20 commitments.

In addition, we have similar concerns to those set out above as regards third country trading venues accessing CCPs per Article 28(5) and we encourage the Council of Ministers and European Parliament to support amendments specifying a timeframe within which the Commission shall recognise equivalent third country trading venues.

We support the general principle of non-discriminatory access to trading venues. We do not believe that Article 29 should be restricted to CCPs only and we support amendments to this provision to make clear that trading venues may not discriminate amongst market participants on access. With regard to CCP access to trade feeds, we support the proposed requirements on trading venues. However, we are sceptical that these requirements will spur substantive competition in derivatives clearing. We are also conscious of the prospective costs of these requirements, particularly in breaking up existing pools of liquidity for some exchange-traded derivative contracts. We urge the Council of Ministers and European Parliament to use this provision to set out a general principle of non-discriminatory access to trading feeds and delegate powers to ESMA to define appropriate conditions.

We broadly support the proposed Article 30 MiFIR provisions on non-discriminatory access to benchmarks.

Appendix

What is High frequency Trading and what are its benefits?

Despite continued attempts a common definition of HFT is yet to be found. FIA EPTA believes too much commentary and media reporting has focused on supposed "high-frequency trading strategies." High-frequency trading is not a strategy; it is simply a new means, or tool, used to implement a range of well-established trading strategies, such as arbitrage and market-making.[3] The members of FIA EPTA are the electronic versions of the floor-based market makers or specialists in the equity markets or "locals" in the futures markets. New technologies such as co-location and high speed data lines are, in some shape or form, used by all actors in the financial industry, including banks, hedge funds, proprietary traders and brokers.

The members of FIA EPTA act as electronic liquidity providers and are a major source of liquidity on public exchanges, across a variety of asset classes. By providing prices at which other market participants may choose to trade, electronic liquidity providers bridge the time gap at which natural buyers and sellers come to the market. In fact, several exchange-traded markets, such as options, futures and ETFs, would simply cease to exist and other markets such as the equity markets would become severely illiquid were it not for these participants. We note that the Foresight Report has found that "high frequency traders now provide the bulk of liquidity"[4].

Apart from providing liquidity, there are other strategies that can be implemented by means of HFT tools. For example, arbitrage strategies ensure that participants can trade at the right price across fragmented markets in the same or related products. For example, a US investor that buys ADRs listed in New York that are economically equivalent to more liquid ordinary shares traded in London wants to pay a price economically equivalent to the ordinary share price. If no market participants provided liquidity in the ADRs through arbitrage between the ADR and the ordinary shares, the US investor would pay a substantially higher price than the price at which the ordinary shares are trading.

The Impact of High Frequency Trading on Long-Term Investors

Since the Commission's first MiFID proposal in October 2011, a number of regulators and government sponsored institutions have concluded that the commonly held negative perceptions surrounding HFT are not supported by the available evidence[5]. The Foresight report, sponsored by the UK Government, came to the conclusion that "computer-based trading has improved liquidity, contributed to falling transaction costs, including specifically those of institutional investors, and has not harmed market efficiency".

The biggest impact of automated trading and high frequency trading has been the decrease of transaction costs for institutional and retail investors. Increased automation in trading technology has enabled many institutions to access the markets through algorithms. Compared to the voice-based brokerage of ten years ago at tariffs of 25–40 basis points, institutions now access the markets through algorithms at rates as low as 1–3 basis points. Data compiled by Oxera shows a decrease of 21% in trading costs between 2006 and 2009.[6] These results are supported by some of the largest asset management institutions such as BlackRock and Vanguard, who have publically stated that transaction costs have fallen as a result of automation and high-frequency trading. Vanguard for example calculates that, as a result of lower transactions costs, the average pensioner will have 30% more funds in his or her investment account over a lifetime.

In addition, using a methodology commonly known as execution shortfall—which measures the difference between the price of a security before an order is entered and the final price paid by the institution—both ITG and Elkins/McSherry, which track this data for scores of institutional investors around the world, show that costs have dropped significantly over the past decade.

Some critics of HFT contend that HFT firms have an unfair advantage over institutional investors because HFT firms have better technology and are faster than these institutions. This notion would only be valid if institutional investors were competing with HFT liquidity providers by pursuing a strategy based on the

[3] We note that our position is in line with the conclusions reached by ESMA"s Task Force established in February 2011 to consider micro-structural issues in an automated trading environment and which resulted in the publication in December 2011 of Guidelines on systems and controls in an automated trading environment for trading platforms, investment firms and competent authorities.
[4] Foresight Report, p.41
[5] Directive 2004/39/EC, Markets in Financial Instruments Directive - 'MiFID' 2002/0269(COD)
[6] Monitoring prices, Costs and volumes of trading and post-trading services", Oxera, May 2011

same intra-day time horizon in which many the HFT liquidity providers operate. That is clearly not the case. Instead, institutional investors make trading decisions by meeting company management and conducting research of companies. This information gives these long term investors an insight into fundamental valuations that are not accessible, and also not of relevance, to those market participants pursuing intra-day strategies. It is no more true that these institutional investors have an unfair advantage over HFT firms because HFT firms do not have the same access to company management and broker research, as it is to claim that these HFT firms have an unfair advantage over long-term investors. Because these two types of market participants pursue different trading strategies, on entirely different investment time horizons, they typically do not compete with each other and act as each other's counterparties as a result.

Periodic illiquidity

The popular notion that the liquidity provided by HFT firms is fleeting is anecdotal at best and not supported by data. Recent data provided by Eurex[7] and the Tokyo Stock Exchange[8] around severe market dislocations showed that these firms stayed in the market during these very volatile periods. Financial Conduct Authority-sponsored research on other markets by the University of Sydney has shown precisely the same results. These firms provide much needed liquidity around very volatile periods.

The May 2010 "flash crash" is often used as the prime example of this fleeting liquidity. It should be noted that even in this cataclysmic event many of these HFT firms continued to trade. The problem was that the demand for liquidity vastly outstripped supply in a very short period of time.

High-frequency trading did not cause the "flash crash" and in fact absorbed the initial sell orders according to a report released by the CME as well as the CFTC/SEC report[9]. In contrast to some media references to high-frequency traders exacerbating illiquidity, the CME review of the trading activity during the period of the flash crash found that most high-frequency traders did not leave the futures markets during the market break and continued to provide liquidity under extreme market conditions. "Based on our review, there is no evidence to support the proposition that high-frequency trading exacerbated the volatility in the markets on 6 May."[10]

Additionally, the CFTC has found in their market study following the "flash crash" that "although some HFTs exited the market for reasons similar to other market participants… other HFTs continued to trade actively"[11]. It should be noted that HFTs must execute trades in order to make profits. As such they have strong incentives to quote very close to or even at market prices. Trading firms sign-up to market-maker and liquidity programs developed and enforced by the trading venues. These programs provide incentives to market makers and liquidity providers in return for meeting certain obligations, such as providing liquidity at the best bid and offer, assuring successful price formation and market stability.

Lessons from the "Flash Crash"

High frequency trading did not cause the "flash crash" according to a joint report by the CFTC and the SEC. The staffs of the two agencies concluded that a large long term investor's order to quickly sell 75,000 CME S&P 500 mini contracts (with a notional value of over $4 billion) created a "liquidity crisis" in the CME E-Mini futures that caused the price to drop more than 5% in four-and-one-half minutes during the most intense part of the episode. This long term investor's order resulted in the largest net change in the daily position of any participant in the S&P E-Mini contract since the beginning of that year, ie it was exceptionally large. At the same time, this long term investor decided to enter this sell order in an algorithm with no regard to price or time limits. In a market that was already extremely volatile because of the European debt crisis (there were riots in the streets of Greece at the time) this order caused the events witnessed that day. The report carried out by the CFTC found that "this sell pressure was initially absorbed by high-frequency traders and other intermediaries in the futures market".[12] The sell-off, however, created high levels of insecurity in the markets as other investors thought they had missed critical information. As a result, other market prices started to rapidly drop as well.

[7] http://www.eurexchange.com/exchange-en/technology/high-frequency_trading/
[8] Tokyo Stock Exchange, Inc.
[9] CFTC Market Event Findings
[10] Comments by Bryan Durkin, Managing Director and Chief Operating Officer, CME Group, to CFTC Technology Advisory Committee, July 14, 2010, page 4 [http://www.cmegroup.com/trading/equity-index/files/CFTC_techadvisory_durkin.pdf]
[11] CFTC Market Event Findings, p.45
[12] CFTC Market Event Findings, p.3

The market events of 6th May in the U.S. exposed shortcomings of the current U.S. securities market structure, most notably the absence of circuit breakers. In addition, these events exposed the need for robust risk controls to be implemented on all algorithms. Had the long-term investor used a price limit in the algorithm that they used that day then this event probably would not have taken place. It is important to note that there are meaningful differences between the European and US market structures. For example, European markets are not linked, unlike in the US where the National Market System operates (under Reg NMS). In addition, most European exchanges have circuit breaker type mechanisms in the form of intraday auctions triggered by high volatility and allow market participants to digest information and bring in additional liquidity. FIA EPTA supports robust requirements for regulated markets' systems resilience, circuit breakers and electronic trading.

Participants' obligations to the marketplace: Article 17(3)

As stated, FIA EPTA opposes a legislatively mandated continuous quoting obligation. FIA EPTA members believe that access to markets should be open to all, non-discriminatory and provided at a reasonable cost to market participants in order to minimise barriers to entry and increase competition. Our members also believe that markets should strive for transparency for investors and market participants, both pre and post trade. Article 17(3) is inconsistent with both these principles.

Article 17(3), in the original Commission proposal, proposes to require a subset of firms to post firm quotes at competitive prices with the result of providing liquidity on a regular and ongoing basis to trading venues at all times, regardless of prevailing market conditions. To impose quoting obligations on a subset of firms in any piece of legislation is, in our view, without precedent. It is akin to mandating all banks to provide credit continuously to whoever demands it, regardless of credit history or any other regular credit considerations. In addition, an obligation to quote continuously is inconsistent with other MiFID objectives, such as prudent risk management. Imposing a continuous quoting obligation on all market makers, as proposed by the Council and Parliament, would cause smaller investment firms engaged in market making to take on risks they may not be able to prudently manage. We therefore believe that market making should remain a voluntary activity.

FIA EPTA is unclear about the risk that Article 17(3) is designed to address, but believes that it is inconsistent with the risk management and transparency objectives in MiFID.

- Inconsistent with Risk Management Objectives. Article 17(3) is inconsistent with the requirement in Article 17(1) for firms to establish effective systems and risk controls. Continuously quoting regardless of prevailing market conditions presents significant risks to an investment firm. Firms must be allowed to pause and assess current market conditions, especially if market information is unavailable or unreliable or trading would require firms to take on positions outside of their risk tolerances.[13]
- Inconsistent with MiFID's Transparency Objectives. Because the requirement in Article 17(3) would make it difficult for firms to provide liquidity on public, transparent markets, market participants would need to find liquidity and trade in the over-the-counter market. Discouraging trading in the public markets is contrary to the transparency objectives in MiFID and EMIR.

Without clear offsetting incentives as proposed by the Commission, an obligation to quote continuously is discriminatory and anti-competitive. Instead of imposing a continuous quoting obligation on a subset of firms, FIA EPTA believes it would be best to let investment firms on a voluntary basis sign-up to a market-marker program developed and enforced by the Regulated Markets. Currently market-maker programs on European and US exchanges generally provide incentives to market makers in return for meeting certain obligations, such as providing liquidity at the best bid and offer, assuring successful price formation and market stability.[14] These regulatory and commercial incentives are designed to offset the costs associated with a market maker's obligations. FIA EPTA, therefore, welcomes the proposed amendment by the Council and Parliament on market maker-schemes in Article 51(1)(a).

Frequency of Order Updates

[13] This was recognised by ESMA in the Final Report on systems and controls in an automated trading environment. In Guideline 2(d) subparagraph 1 ESMA states that "working effectively in stressed market conditions may imply (but not necessarily) that the system or algorithm switches off under those conditions". In addition, in Guideline 2(e) subparagraph 1, ESMA states that investments firms should deal adequately with problems identified as soon as reasonably possible in order of priority and be able when necessary to adjust, wind down, or immediately shut down their electronic trading system or trading algorithm."

[14] We note that even the most stringent market maker programs do not require market makers to maintain continuous two-sided quotes 100% of the time.

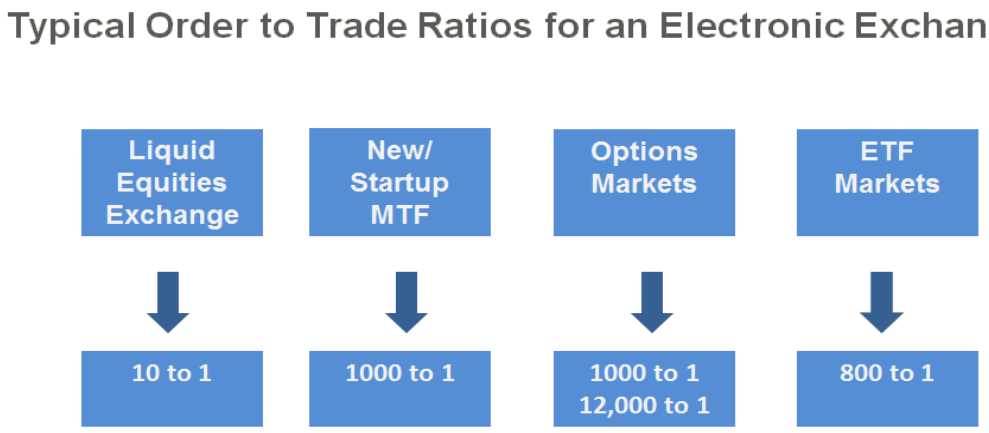
One of the notable features of modern, electronic markets is the frequency of order changes sent by market participants. These frequent updates and the resulting level of orders that are not executed prior to being updated is a consequence of other positive changes to market structure. It is important to understand the relationship between the frequency of order updates and the competitive and efficient markets investors enjoy today.

In particular, MiFID 1 fostered competition among trading platforms, which has benefitted investors through narrower spreads (the difference between the price to buy and sell an instrument). This competition also means that there are more trading platforms. When an electronic market maker provides quotes in the same instrument on a multitude of different platforms, it contributes to liquidity and pricing efficiency among these platforms. In providing these current and competitive quotes to many platforms, market makers must send, in aggregate, many more order updates than if there were a single platform. These order updates to multiple platforms, along with the need to maintain consistent pricing across these venues, increase the number of unexecuted orders exponentially.

In addition, the competition among trading platforms has led to narrower spreads, which is one of the great successes of MiFID 1 and has quantifiably reduced costs to investors. It is important to understand that these more narrow spreads lead to more unexecuted orders and efforts to reduce unexecuted orders will lead directly to wider spreads.

Electronic market makers must control the risks of providing public and transparent prices to the market at very narrow spreads. The risk that a market maker´s quote does not reflect the current market is higher when its quotes a narrow spread than when it quotes a wide spread. Accordingly, to control the risk of quoting a narrow spread, market makers must update their quotes frequently. For example, a market maker that quotes a spread of 10 cents in a security that changes in price within in a 15 cent range over the day would only need to update its quote several times that day. But, a market maker that quotes a spread of 1 cent, which is common in today's competitive market, would need to update its quote more than a thousand times in a day. For this reason, a narrower spread, which is clearly a desirable outcome for end-users in a market, results in more unexecuted orders. Moreover, if costs or other impediments are imposed on market makers ability to update their quotes, market makers will only be able to control their risks by widening the spread – a cost that will be borne by investors.

Order-to-trade ratios vary significantly across markets. The chart below gives an indication of these differences.



Order-to-trade Ratios

A regulated market's limits on the ratio of unexecuted orders to transactions as required in Article 51(3) can complement the markets' procedures and arrangements to ensure its trading systems have sufficient capacity to deal with peak order message volumes and to ensure orderly handling of trading in all market conditions. However, one should keep in mind that the consequences of order-to-trade ratios is also that liquidity providers will send less quotes to the exchanges, which in turn will lead to wider spreads and less liquidity. This will in turn result in higher trading costs for end investors.

FIA ETPA, believes that limits on order-trade ratios are best left to trading venues (both regulated markets and MTFs) to determine, in consultation with their home country regulator. Even a relatively generous ratio on the Italian Stock Exchange of 100 to 1 resulted in a widened spread and a decrease in liquidity[15]. A one-size-fits-all approach, as currently contemplated would harm liquidity and discourage competition in certain asset classes. Regulators have an interest in trading platforms establishing order-to-trade ratios that ensure market participants do not send more messages than exchange systems can process. This ratio, however, will vary – sometimes dramatically – depending on a regulated market's technology and systems. Because there is a positive relationship between speed, capacity and liquidity, some trading venues may choose to invest heavily in the most up-to-date technology that allows the market to handle large volumes of information quickly.

More importantly, new entrants, with few trades, will initially have much higher order-to-trade ratios as they try to gain market share from more established markets. For this reason, limiting the order-to-trade ratio on a basis other than the ability of a particular trading platform to handle messages would be anticompetitive because it would limit the ability of trading venues to compete on the basis of the quality of their systems and would be a barrier to entry to new markets. In addition, it will become virtually impossible for some derivative asset classes such as exchange traded options or ETFs to be screen traded. Furthermore, exchanges have a strong economic incentive to limit excessive order messaging. In an environment where exchanges are competing for order flow, having the capacity to handle large numbers of order messages with little or no effect on system performance is an important competitive advantage.

For this reason, technologically advanced exchanges such as Eurex, CME Group and ICE have developed policies to penalize firms that engage in excessive messaging. In effect, the exchanges are discouraging the wasteful use of an expensive resource.

FIA EPTA believes that reasonable order-to-trade ratios can complement other measures to ensure that markets' systems operate in an orderly manner. It is important that any order-to-trade ratios consider the following characteristics:

(i) Liquid v. Illiquid Products. Trading venues need to consider the differences between liquid and illiquid products. Products that are traded infrequently will require higher order-to-trade ratios than high volume products.
(ii) Type of Market Participants. Market makers that post quotes will send more messages than participants that remove those quotes. For this reason, market makers should be permitted higher order-to-trade ratios than other types of market participants.
(iii) Impact on Spreads. Unless carefully tailored to the product and market, order-to-trade ratios can cause spreads to widen – thereby increasing costs to investors and potentially making over-the counter markets and other "dark" venues more attractive.

Minimum Order Resting Time

Another method suggested for limiting the number of messages sent to markets is to require that orders rest on the market for a minimum period of time, for example 500 milliseconds. However, unlike order-to-trade ratios, which can be designed to eliminate inefficient quoting without impacting the quality of quotes, a minimum resting time for all orders or quotes would increase the market risk of posting such an order or quote. Requiring participants to expose themselves to the risk of a market move for an artificial length of time would cause providers of liquidity to adjust their pricing to accommodate the uncertainty of market moves during that period. The cost of this additional risk would be reflected in each order or quote through wider spreads and would, in turn, raise trading costs for all investors, both retail and professional.

In addition, we believe minimum order resting times will have the following negative side-effects:

- It would take European markets back at least seven years and would undo much of the improvements in market quality achieved over that time. Spreads would widen, and liquidity would decrease, resulting in higher transaction costs for end users and less liquid markets. It is ironic that growth market exchanges in countries such as Brazil, Hong Kong and Singapore are making substantial investments in technology in order to improve liquidity, whilst Europe is contemplating doing the reverse.
- Wider spreads would move more volumes to be transacted off-exchange and incentivize internalization, contrary to the objectives of MiFID and EMIR.

[15] Order-to-trade ratios and market quality; Sylvain Friederich and Richard Payne April 19, 2013

- In times of extreme volatility, market makers would be more reluctant to provide liquidity because of the added risks, vastly increasing the chances for more extreme price swings.
- It is worth noting that this method would make liquidity adding strategies substantially less attractive, whilst liquidity taking strategies would potentially benefit because of increased market inefficiencies.

FIA EPTA understands that there is public debate about the speed at which trading in modern markets occurs. For FIA EPTA members, speed is an essential tool to manage risk by controlling how and when orders are placed and modified. For each order or quote that an FIA EPTA member displays on a market and with which other market participants may trade, the firm is exposed to risk for that order or quote. If the market moves, the firm remains at risk that another participant will trade with its "stale" order or quote. The faster a market can process a firm's cancellation or modification of its order or quote in response to new market information, the better FIA EPTA members can manage their risks. This ability for FIA EPTA members to manage their risks ultimately benefits other market participants through better priced and larger-sized quotes. For these reasons, FIA EPTA members believe that well calibrated order-to-trade ratios are a better means to limit unwanted messages. Order-to-trade ratios allow market participants to manage their trading activities within clearly established parameters, while preserving the risk management benefits of allowing quotations to be modified as quickly as technology permits.

The myths surrounding HFT

The number of myths surrounding HFT has reached a high level. Below, some of the main myths are dispelled:

Myth: High frequency trading adds no value to the real economy.

Reality: HFT has substantially reduced frictional costs in the markets. According to Gus Sauter, Chief Investment Officer at Vanguard, transaction costs on US equities have been cut by about 60% in the last 15 years. He states "Generally speaking, high-frequency traders provide liquidity and "knit" together our increasingly fragmented marketplace, resulting in tighter spreads that benefit all investors. We believe that a vast majority of "high-frequency trading" is legitimate and adds value to the marketplace." The savings reaped by individual investors from these reduced transactions costs have been significant. According to Sauter, "reduced transaction costs have enabled a mutual fund investor to reasonably expect an investment balance that is perhaps 30% higher than what they could have expected only a decade ago."

Myth: High Frequency Trading increases volatility.

Reality: The evidence does not support this assertion; in fact there is much evidence to the contrary:

- Much academic evidence concludes that HFT either has no effect or reduces volatility[16]. The one research report that concludes otherwise[17] is linking HFT activity to volatility but does not prove the causal link.

- Intraday volatility, which is the kind that HFT could influence, has remained constant in relation to end of day volatility (which is the kind that HFT cannot influence). In fact in many markets, the last period of great volatility (2001-2003) saw a higher degree of intraday volatility in relation to end of day volatility.

- Volatility in many OTC traded asset classes (CDS, IR Swaps, etc) have been at least as high, if not higher as the exchange listed asset classes. HFT has no involvement in OTC traded asset classes

Myth: High Frequency Traders exit the market in times of high volatility.

Reality: There is no evidence to support this assertion. In fact there is much evidence to suggest the opposite, which is logical. In times of volatility, the demand for liquidity (i.e. the services of HFT firms) is higher and they tend to have higher market shares as a result. FIA EPTA's own data on member's market shares clearly shows that they are highest in times of volatility.

Myth: High Frequency Traders provide "fake" liquidity; many of the quotes provided by HFT firms are withdrawn before they can be acted upon

Reality: This statement implies a misunderstanding of the way that automated markets work; all automated and regulated exchanges operate so-called auto-execution functionality. There is no conceivable way to put fake quotes into this system. All available quotes and orders can be executed against. Furthermore, if the quotes that HFT firms put into the market were fake, such firms would not have the large, widely publicised market shares. The reason firms update quotes is a matter of risk management. The ability to frequently update quotes allows market making strategies to quote for narrower spreads at larger sizes, benefitting all market participants.

Myth: High Frequency Trading is not transparent

Reality: High frequency trading takes place on automated platforms. All quotes and all trades that are sent into these markets can be automatically executed against by other market participants.

Myth: HFT firms make their money by arbitraging latency

[16] CME Group July 2010; Jarnecic, Snape, June 2010; Hendershott, Rioirdan, Brogaard, 2009; Chaboud, Hjalmarsson, Vega and Chiquoine, October 2009; Hasbrouck, Saar, May 2011; Credit Suisse, April 2010; Frino and Zheng, 2011; UK foresight committee

[17] Frank Zhang, Yale University, November 2010

Reality: Much is being made of something referred to as ‘latency arbitrage’ that is meant to be a popular HFT strategy. Or in the words of a critic: ‘HFTs know with near certainty what the market will be milliseconds ahead of everybody else – valuable knowledge that HFTs take advantage of when they trade thousands of stocks, thousands of times, every trading day’ .

Now arbitrage is the simultaneous purchase and sale of a security in order to profit from a price discrepancy. The theory around latency arbitrage suggests that some firms know ahead of time when transactions take place. This assertion is however factually incorrect. All data feeds, direct or consolidated, give historical price data. The firm that sees that a transaction has taken place at for example 09.41.12 will see this several microseconds after this event and those participants using the slower data feeds will see this data several milliseconds after that. So the firm with the direct data feed sees this information quicker but still only after the trade has taken place.

There is no conceivable way for an HFT or any other trader to know that an order will arrive in the future. The basic mistake many critics are making is that they compare a slow feed and a faster feed with history and future, whereas they are both historical.

FIA European Principal Traders Association

FIA EPTA is an association of European principal traders formed in June 2011 under the auspices of the Futures Industry Association (FIA). FIA EPTA represents 23 principal trading firms that, on a combined basis, are responsible for significant volumes of trading in many asset classes on European regulated markets and multilateral trading facilities (MTFs). On average and across the main trading venues in Europe, one in two transactions in futures and one in three transactions in equities very likely have an FIA EPTA member firm on one or both sides of the transaction[18].

The mission of FIA EPTA is to support transparent, robust and safe markets with a level playing field for all market participants. As such and in light of market driven events and key technological developments since MiFID was first implemented in 2007, FIA EPTA members welcome the European Commission's proposals and fully endorse the objectives supporting the MiFID II Review. In formulating its positions and careful considerations with regards to the key MiFID II proposals, the group has been able to draw on a wealth of expertise and detailed knowledge of the markets from the perspective of its experienced and sophisticated membership.

FIA EPTA members trade their own capital. If a member fails, there will be no government bail-out. As such, FIA EPTA members have every incentive to implement robust risk controls to prevent disorderly trading or market abuse. Accordingly, the members support the requirement for risk controls set out under Article 17(1).

In addition, FIA EPTA members are very supportive of the ESMA Guidelines on systems and controls in an automated trading environment that are coming into force in May 2012. We are continuously working to improve approaches to risk controls and to make financial markets more secure overall. In this context FIA EPTA published several papers including F*IA EPTA "Market Integrity Framework: Best Practices to Preserve Market Integrity"*[19] as well as "*Software Development and Change Management Recommendations"*[20]*.*

The members of FIA EPTA have been very engaged in the process ranging from individual contributions to the consultation in 2011, participation in a number of industry round-tables, feedback to their home regulator / ESMA and finally coordination amongst firms with regards to implementation of the guidelines.

[18] These ratios are based on estimates of the association and the understanding that each transaction has two sides.
[19] http://www.futuresindustry.org/epta/downloads/EPTA-Market-Integrity-Framework_072012.pdf
[20] http://www.futuresindustry.org/downloads/Software_Change_Management.pdf