



Deutsche Börse Group

**Deutsche Börse Group's Response  
to  
Consultation Paper:  
'Guidelines on systems and controls in a highly  
automated trading environment  
for trading platforms, investment firms and  
competent authorities' by ESMA**

**Frankfurt / Main, September 2011**

## Introductory Remarks

Deutsche Börse Group (DBG) welcomes the opportunity to contribute to the consultation paper on 'Guidelines on systems and controls in a highly automated trading environment for trading platforms, investment firms and competent authorities' by ESMA. We support the introduction of these guidelines and consider it important to provide more clarity for trading venues and investment firms in order to deal with expectations by the competent authorities as well as to reduce uncertainties among market participants in a highly automated trading environment.

Electronic trading is long established in the financial service industry. Technological changes have brought many positive effects to all market participants (e.g. electronic order management systems or execution algos for the buy-side). Orders are increasingly being generated by computers. High frequency trading (HFT) is a natural evolution of the financial markets, and not a new phenomenon. The majority of HFT based strategies contributes to market liquidity or to price discovery and market efficiency. Preventing these strategies by inadequate regulation or by impairing underlying business models through excessive burdens may trigger counterproductive and unforeseen effects to market quality. However, we believe that in general, any abusive strategies against market integrity must be effectively opposed by supervisory authorities.

In the public debate, HFT is often associated with increasing volatility and is viewed critically by politicians. Recent academic studies show that there is no direct link between HFT and volatility<sup>1</sup> and that HFT instead contributes to the market quality. It is important to point out the positive contributions HFT makes to market quality, while taking the concerns in terms of the safety and integrity of markets<sup>1</sup> very seriously as well. Unsubstantiated regulation of HFT could adversely affect the liquidity of trading venues and their innovation. Moreover, it could impair trading venues by pushing trading further towards less regulated platforms.

We elaborate on principles raised in the consultation report in more detail below.

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<sup>1</sup> E.g. Working paper commissioned by the UK Foresight Project, please see <http://bis.gov.uk/assets/bispartners/foresight/docs/computer-trading/11-1276-the-future-of-computer-trading-in-financial-markets.pdf>;

Peter Gomber et. al. (2011), 'High Frequency Trading', please see: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1858626](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1858626);

Jonathan A. Brogaard (2010): 'High Frequency Trading and its Impact on Market Quality', please see <http://ssrn.com/abstract=1641387>.

## General Remarks

We have noted that the definitions of HFT proposed in the MiFID review draft proposal differ from the one in the ESMA consultation paper (p.10, No. 12).

*"[...] A specific subset of algorithmic trading is high frequency trading where a trading system analyses data or signals from the market at high speed and then sends or updates large numbers of orders within a very short time period in response to that analysis. High frequency trading is typically done by the traders using their own capital to trade and rather than being a strategy in itself is usually the use of sophisticated technology to implement more traditional trading strategies such as market making or arbitrage."*

We'd recommend aligning the definitions and ensuring having the following main aspects included:

- High frequency trading is a sub-group of algorithmic trading (*included*)
- It is a technology (and not a strategy) that is used by three organisational forms of HFTs (prop trading of investment firms, hedge funds and prop trading companies) (*included*)
- Trading in a very short time span with small price differences (*included*)
- Velocity is their strategically most important advantage in competition (*included*)
- Two major types of HFTs: electronic liquidity provision and statistical arbitrage (*partly included*)
- Predominantly prop traders (*included*)
- Predominantly closed positions at the end of the day (*partly included*)
- Predominantly focus on high-liquid shares (*not included, but not absolutely necessary*)
- Predominantly no ,conventional' or ,traditional' traders, but mathematically and technically oriented guys (*not included, but not absolutely necessary*)

Additionally, we want to emphasize that the US 'Flash Crash' (p. 11, No. 14 / 15) is not transferable to the European market. There are effective mechanisms in place to prevent such market disruption in Germany and Europe (such were introduced in the US lately). Moreover, the market structures differ essentially: principles based trading in Europe (with no obligation to route orders to other trading venues) versus trade through rule in the US market. Measures taken in context of US regulation are therefore directly not transferable to Europe.

## Detailed Remarks on Questions

***Q1: Do you agree with ESMA that it is appropriate to introduce guidelines already before the review of MiFID covering organisational arrangements for trading platforms and investment firms in relation to highly automated trading, including the provision of DMA/SA?***

DBG supports the introduction of guidelines on systems and controls in a highly automated trading environment by ESMA. However, it needs to be ensured that unsubstantiated regulation of HFT does not adversely affect the liquidity of trading venues and their innovation.

Furthermore, these guidelines will require adaption after the MiFID review will be finalized. Nonetheless, we consider it important to provide more clarity for trading venues and investment firms in order to deal with expectations by the competent authorities as well as to reduce uncertainties among market participants in a highly automated trading environment.

***Q2: Do you think that the draft guidelines adequately capture all the relevant points relating to the operation of trading platforms' electronic trading systems?***

Yes, the draft guidelines adequately capture all relevant points, except for the business continuity and resilience arrangements. We recommend to not only address system failures, but also incidents which could render unavailable staff, workspace or suppliers required to continue to operate the trading platform and related services.

***Q3: Are there areas where it would be helpful to have more detail on the organisational requirements applying to trading platforms' electronic trading systems?***

No. We do consider the organisational requirements as appropriate. Eventually, competition will ensure a high quality of the resilience of the trading system.

***Q4: Do you have additional comments on the draft guidelines on organisational requirements for trading platforms' electronic trading systems?***

Yes, we do have two points:

(1) We definitely agree that trading platforms should have appropriate capacity limits for volumes; however, we do consider the figures as suggested by ESMA as implausible (e.g. it is unrealistic to increase capacities to a multiple of up to 20 times the level of order flow of a peak day). Nowadays, trading venues already monitor their system load very closely and calibrate their systems respectively in order to provide sufficient headroom at all times.

(2) It is not clear why ESMA differentiates between members, participants and users which is confusing and misleading. We recommend referring only to "members", because it does

clarify that they have a legal relationship with the trading venue and therefore addresses the right entity in the context of this guideline.

***Q5: Do you think that the draft guidelines adequately capture all the relevant points related to the operation of trading algorithms?***

Yes, we do think that the draft guidelines adequately capture all relevant points, except for the business continuity and resilience arrangements. Similarly to trading platforms, we recommend to not only address system failures, but also incidents which could render unavailable staff, workspace or suppliers required to continue to operate the trading.

In principle, we would like to stress that risk management at the source of the order flow is necessary and that therefore investment firms should have sophisticated risk management tools and safeguards in place.

***Q6: Are there areas where it would be helpful to have more detail in the guidelines applying to the organisational requirements for investment firms' electronic trading systems?***

No. We do consider the organisational requirements as appropriate.

***Q7: Do you have additional comments on the draft guidelines relating to organisational requirements for investment firms' electronic trading systems?***

Cf. our comment (2) under Q4.

***Q8: Do the draft guidelines on organisational requirements for trading platforms to promote fair and orderly trading offer a sufficiently comprehensive list of the necessary controls on order entry?***

Yes, all major aspects are covered.

***Q9: Are there any areas of the draft guidelines on organisational requirements for trading platforms to promote fair and orderly trading where you believe it would be helpful to have more detail?***

No. We do consider the organisational requirements as appropriate.

***Q10: Do you have additional comments on the draft guidelines on organisational requirements for trading platforms to promote fair and orderly trading?***

Yes, we do have four further points:

(1) There are two topics that are not correctly located at the chapter trading platforms. The part "standardised testing to ensure that the systems that members are using to access the

venue have a minimum level of functionality that is compatible with fair and orderly trading on the venue" and "IT compatibility" should rather be included in the guidelines on organisational requirements for investment firms to promote fair and orderly trading. Investment firms are at the source of orders and ESMA correctly indicates that increased measures and controls are necessary.

(2) Cf. comment (2) in question 4.

(3) We strongly support the concept of circuit breakers as they have a stabilising effect on the markets. However, further clarification / discussion on details is required (e.g. definition, scope and applicable instruments) which have not yet been discussed in this guideline.

(4) With regard to throttles it should apply to any message (order entry, modification, deletion). Currently it reads as it might only apply to order entries.

***Q11: Do the draft guidelines on organisational requirements for investment firms to promote fair and orderly trading offer a sufficiently comprehensive list of the necessary controls on order entry?***

We do have three additional comments:

(1) From an exchange perspective, we deem it necessary that parties responsible for operating algos must be accessible at all times. In addition, it is essential for surveillance functions to identify all information concerning transactions and order entries (order generator e.g. beneficial owner or fixed IP addresses and trading intention e.g. the applied strategy) to constitute an initial suspicion. Due to the fact that the human trader has been (or is increasingly becoming) replaced by machines, it becomes harder for supervisors or trading venues to constitute an initial suspicion, we suggest that this is a valid point, and therefore should be part of this guideline. In order to detect an initial suspicion it is necessary that order generator and the applied strategy is identifiable on an order level, thus flagging each order with the applied strategy and order generator.

(2) From a supervisory authority point of view it essential to access additional data for investigation and back testing options (in order to verify testified statements). This would include the recording of all input and output parameters with respect to each applied strategies in order to be able to reconstruct and evaluate the systems behaviour. Section 1 and 2 together are essential in order to monitor for alleged violations and the ability to proof the intention of the potential delinquent without the need for detailed disclosure of program code.

(3) We recommend including the aspect that "Investment firms should ensure that the systems that they are using to access the venue have a minimum level of functionality that is compatible with fair and orderly trading on the venue". This point was addressed in the guideline for trading venues to promote fair and orderly trading. However, as this is within

the responsibility of the investment firm or lies with the service provider and not of the trading venue, it should rather be included for investment firms.

***Q12: Are there any areas of the draft guidelines on organisational requirements for investment firms to promote fair and orderly trading where you believe it would be helpful to have more detail?***

No. We do consider the organisational requirements as appropriate.

***Q13: Do you have additional comments on the draft guidelines on organisational requirements for investment firms to promote fair and orderly trading?***

No.

***Q14: Are there any areas of the draft guidelines on organisational requirements for trading platforms to prevent market manipulation where you believe it would be helpful to have more detail?***

No. We do consider the organisational requirements as appropriate.

***Q15: Do you have additional comments on the draft guidelines on organisational requirements for trading platforms to prevent market manipulation?***

One comment, cf. comment 2 in question 4.

***Q16: Are there any areas of the draft guidelines on organisational requirements to deal with market manipulation for investment firms where you believe it would be helpful to have more detail?***

No. We do consider the organisational requirements as appropriate.

***Q17: Do you have additional comments on the draft guidelines relating to organisational requirements to deal with market manipulation for investment firms?***

Yes. Extend point 3 by adding "They should be able to deliver supervisory authorities with necessary data for investigation and back testing options, when required. This would include the recording of all input and output parameters to be able to reconstruct the behaviour of the systems." This will eventually help competent authorities.

***Q18: Do the draft guidelines on organisational requirements for trading platforms whose members/participants or users offer DMA/SA deal adequately with the differences between DMA and SA?***

We would like to discuss the definition of DMA / SA by suggesting to include the aspect of due diligence (i.e. clients that should be subject to adequate due diligence) for both DMA / SA and the fact that the risk layer is part of the exchange venue and not at the member level for SA.

In principle, we want to stress that responsibility of the service offered ultimately lies with the DMA / SA provider.

***Q19: Are there any areas of the draft guidelines on organisational requirements for trading platforms whose members/participants or users offer DMA/SA where you believe it would be helpful to have more detail?***

No. We do consider the organisational requirements as appropriate.

***Q20: Do you have additional comments on the draft guidelines relating to organisational requirements for trading platforms whose members/participants or users provide DMA/SA?***

Yes, we do have one additional comment to the point "require the member to conduct adequate pre-checks of their clients due diligence on any client to which it provides direct market access / sponsored access". We believe that it might be useful to add a short explanation of due diligence in the explanatory notes. Basically, we consider it as important to have an adequate due diligence, however, it should be related to the business risk involved from the DMA / SA user.

***Q21: Do the draft guidelines on organisational requirements for investment firms providing DMA/SA deal adequately with the differences between DMA and SA?***

Cf. our response to question 18 with respect to the aspect of due diligence.

***Q22: Are there any areas of the draft guidelines on organisational requirements for investment firms providing DMA/SA where you believe it would be helpful to have more detail?***

No, all major aspects are covered.

***Q23: Do you believe that there is sufficient consistency between the draft guidelines on organisational requirements for investment firms providing DMA/SA and the SEC's Rule 15c3-5 to provide an effective framework for tackling relevant risks in cross-border activity and without imposing excessive costs on groups active in both the EEA and the US?***

We do consider the ESMA-guidelines as appropriate taking into account our comments in this response.

***Q24: Do you have additional comments on the draft guidelines on organisational requirements for investment firms providing DMA/SA?***



No.

***Q25: Does the explanatory text provided in addition to the guidelines (see Annex VII to this CP) help market participants to better understand the purpose and meaning of the guidelines? Should it therefore be retained in the final set of guidelines?***

We believe that the explanatory text is supportive. However, it should not be retained in the final set of guidelines, but rather be kept as an explanatory note.

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