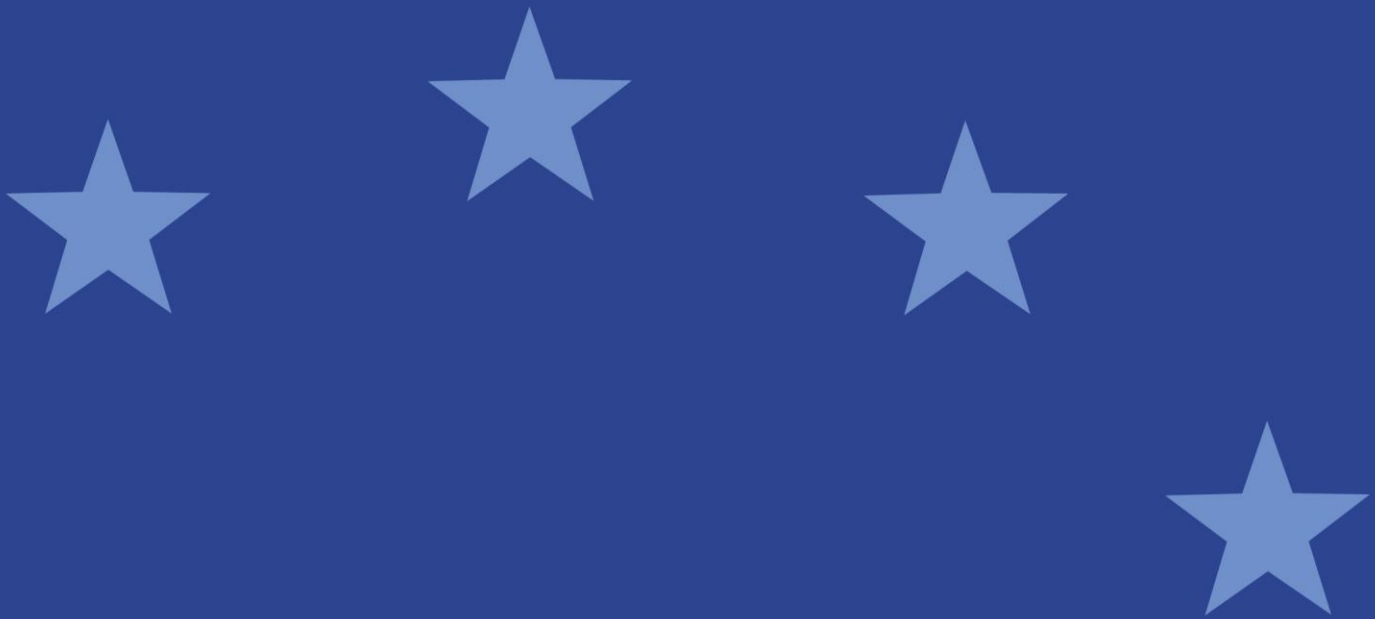




European Securities and
Markets Authority

Reply form for the Consultation Paper on the Algorithmic Trading



Responding to this paper

ESMA invites comments on all matters in this consultation paper and in particular on the specific questions summarised in Annex I. Comments are most helpful if they:

- respond to the question stated;
- indicate the specific question to which the comment relates;
- contain a clear rationale; and
- describe any alternatives ESMA should consider.

ESMA will consider all comments received by **12/03/2021**.

All contributions should be submitted online at www.esma.europa.eu under the heading 'Your input - Consultations'.

Instructions

In order to facilitate analysis of responses to the Consultation Paper, respondents are requested to follow the below steps when preparing and submitting their response:

1. Insert your responses to the questions in the Consultation Paper in the present response form.
2. Please do not remove tags of the type <ESMA_QUESTION_ALGO_1>. Your response to each question has to be framed by the two tags corresponding to the question.
3. If you do not wish to respond to a given question, please do not delete it but simply leave the text "TYPE YOUR TEXT HERE" between the tags.
4. When you have drafted your response, name your response form according to the following convention: ESMA_ALGO_nameofrespondent_RESPONSEFORM. For example, for a respondent named ABCD, the response form would be entitled ESMA_FOTF_ABCD_RESPONSEFORM.
5. Upload the form containing your responses, in Word format, to ESMA's website (www.esma.europa.eu under the heading "Your input – Open consultations" → "Consultation on Algorithmic Trading").

Publication of responses

All contributions received will be published following the close of the consultation, unless you request otherwise. Please clearly and prominently indicate in your submission any part you do not wish to be publically disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure. A confidential response may be requested from us in accordance with ESMA's rules on access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by ESMA's Board of Appeal and the European Ombudsman.

Data protection

Information on data protection can be found at www.esma.europa.eu under the heading [Legal Notice](#).

Who should read this paper

This document will be of interest to (i) alternative investment fund managers, UCITS management companies, EUSEF managers and/or EuVECA managers and their trade associations, (ii) distributors of UCITS, alternative investment funds, EuSEFs and EuVECA, as well as (iii) institutional and retail investors investing into UCITS, alternative investment funds, EuSEFs and/or EuVECA and their associations.

General information about respondent

Name of the company / organisation	Deutsche Börse Group (DBG)
Activity	Regulated markets/Exchanges/Trading Systems
Are you representing an association?	<input type="checkbox"/>
Country/Region	Germany

Introduction

Please make your introductory comments below, if any

<ESMA_COMMENT_ALGO_1>

Deutsche Börse Group (DBG) is generally supportive of the MiFID II framework for algorithmic trading and appreciates the opportunity to respond to this consultation paper. In general, we agree with ESMA’s analysis of the algorithmic trading landscape. To this point, we have not identified an entirely new development in algorithmic trading that would require dedicated action. Any risks associated with algorithmic trading are well addressed through the requirements and responsibilities of investment firms and trading venues stipulated by MiFID II. We believe that the MiFID II/MiFIR framework for algorithmic trading has proved its efficiency over the last years – especially during times of high amounts of trading and volatility present in 2020 during the COVID-19 crisis – and hence any changes should be limited and targeted.

In this context, we would like to express our support for several of ESMA’s proposals and would like to provide some additional recommendations in our response:

Scope of algorithmic trading – We support ESMA’s recommendation that the definition of algorithmic trading should apply to SIs and that key requirements at SI level for OTC algorithmic trading should include governance arrangements for trading system and trading algorithms, controlled deployment of algorithms and kill functionality and other risks controls given the role that SIs play in today’s equity markets and given that business activities of SIs are to a large extent opaque.

HFT – DBG believes the HFT definition and methodology under MiFID II seem reasonable and well calibrated, and we would recommend not changing them to any dynamic intraday calculation.

DEA – DBG would agree with the ESMA's view that DEA clients shall adhere to MiFID II requirements when applying algorithmic trading techniques. Nevertheless, we would like to emphasise that information regarding DEA clients (including sub-delegation) is not available to a trading venue. According to Level 1 and 2 provisions, DEA providers have a contractual relationship with DEA users, are responsible for their clients’ order flow and should therefore clarify whether clients apply algorithmic trading techniques and whether they adhere to MiFID II provisions. In addition, we do not think that further clarification in relation to online brokerage would be required as MiFID II clearly established a differentiation between DEA and intermediation, and we agree with ESMA that retail clients are not considered to perform

investment activities on a professional basis. Importantly, DBG welcomes the deletion of the exception to the exemption from authorisation as investment firm for persons having DEA to a trading venue as we agree with ESMA's view that the obligations and responsibilities relating to DEA providers already provide meaningful controls over DEA users. Further, we agree with ESMA's analysis that any Tier 2 DEA client would not technically be in possession of the trading code of the DEA provider. Therefore, DBG does not support extending the definition of DEA users to sub-delegated clients. Last but not least, trading venues do not have information about names and numbers of DEA users, and we do not think that providing this information is necessary as it is already available through transaction reporting.

Self-assessment – DBG supports ESMA's proposal to limit the self-assessment to every two years and to continue sharing them with the relevant national competent authority (NCA). Nevertheless, should a harmonised structure be provided in the future, any additional operational and compliance-related burdens should be avoided and trading venues should be granted sufficient time to implement any new format.

Testing – DBG thinks that the current testing requirements for algorithms are sufficient and does not support pre-defined testing scenarios. A one-size-fits-all approach would not reflect the heterogeneity of trading participants business models and trading behaviours. Our simulation environments reflect the production environments and enables our members to address their individual test cases in a realistic environment, and do so frequently.

Circuit breakers – DBG agrees with ESMA's analysis that volatility interruption mechanism at DBG's trading venues served its purpose efficiently and helped to ensure orderly trading on our trading venues during highly volatile and stressed market phases. We therefore agree as well that the requirements for circuit breaker mechanisms as they are currently set are adequate and sufficient and that regulatory changes are not necessary. The current regulatory set-up, combining a comprehensive legal framework and market operators' discretion on the actual design of the mechanisms, results in a market environment that effectively contributes to ensure price quality and financial stability.

OTR – DBG does not support a convergence of maximum OTR ratios and believes that the determination of maximum OTR ratios should remain in the responsibility of each trading venue. Any pre-defined maximum OTRs would not take into account that a certain instrument might need different limits on different venues as well as the variety of trading participants and heterogeneity of different markets. Further, we do not see any underlying issues with the observation that the maximum limits have not been frequently exceeded. DBG is of the opinion that this is the result of a profound analysis and subsequent determination of limits. We determined the maximum ratios by analysing the trading activity of all trading participants per asset class. Maximum ratios were set in a manner that outliers were going to be penalized but that regular trading activity of the trading participants would not artificially be impacted. In addition, we have installed additional layers of defence, warning and slowing down participants reaching the limits. Further, trading participants themselves often monitor and control their message flow to avoid exceeding the limits. As a result, we do not think that a more convergent approach is useful regarding the consequences of exceeding the maximum limits as we believe that the current surveillance and sanctioning process works fine.

IT incidents/outages – Swift incident communication is of course very important for oversight authorities. Hence, DBG's trading venues have established well-functioning procedures of notification to the respective NCAs in case of IT incidents/outages informing them as swiftly as possible and in accordance with the legal notification obligations. Therefore, we do not believe that there is a need for further streamlining the notification procedures from trading

venues to NCAs and ESMA via additional guidance. Furthermore, DBG has put in place a standardized and reliable process of streamlined communication to customers over multiple channels. Nevertheless, DBG is always looking at ways to improve our processes. We are therefore continuously in close dialogue with our trading members and we would be open for sharing best practice and aligning on core aspects of communication in case of an outage via industry standards. Regarding, initiatives aiming at continuity of trading in case of an IT incident/outage, DBG does not believe that such an initiative should be put forward given a close to 100% system performance of main markets. We would caution against forcing algorithms to include different sources of information. The underlying assumption seems to be that regulated markets, MTFs and potentially SIs are set on the same level in terms of price formation and information, with easy switch from one to the other, putting aside respective market shares and the notion of reference market. The explored initiative would hence introduce an artificial change to the current market structure which is at odd with MiFID. To the contrary, the flight to execution at quality the height of volatility in the COVID-19 crisis proved once more that there was a need by investors to trade on transparent regulated markets when looking at the migration of volumes from dark, SI, and OTC trading to regulated markets. Last but not least, it should be up to the trading participants to decide if they see merit in connecting to more than one reference data point or not, but they should not be forced upon by regulation.

Tick sizes – DBG’s internal assessment of the tick size regime on Xetra instruments does not indicate that it had a positive effect on market depth and transaction costs. We only observe an expected mechanical effect related to tick size changes. The effects are more pronounced for most liquid stocks. We would recall that 80% of the DAX, SDAX and MDAX instruments have experienced an increase in tick size, which would tend to indicate an increase in trading costs under the new regime. In addition to this, DBG would like to underline that it is crucial that the tick size regime is applied uniformly across jurisdictions and followed by all execution venues. In this context, we would highlight again that there should be no exemptions to the tick size regime. Thus, we would suggest moving the ESMA Level 3 guidelines to Level 2 to ensure a level playing field within the EU. In addition, we provide some recommendations regarding technical issues with the FITRS database. We would also like to bring ESMA’s attention on the frequency of calculations updates as an update half year could be beneficial to reflect changes in liquidity – especially in light of Brexit implications. Last but not least, DBG appreciates that RTS 11 was amended to allow tick size adjustments for non-EU shares. However, we would still like to point at the inconsistency between the definition of third country shares and the definition of non-EU shares; any share considered as non-EU should be eligible to an adjustment of their tick size, provided that liquidity is higher outside of the EU. In light of Brexit implications, DBG encourages ESMA to consider a recalculation of the MRMTL and the ADNT mid-2021, based on the first six months of the year, and to apply until the next yearly calculations applying in April 2022. This would ensure that the MiFID II parameters reflect the real level of liquidity in the EU for EU shares and would as well allow for the adjustment of third country shares to their level of liquidity outside of the EU. Last but not least, DBG supports a harmonised approach across all ETFs and execution venues. However, the current tick size regime defined in RTS 11 was calibrated to match the liquidity profile of equities. This approach does not fit ETFs which track a broad range of underlying markets, including fixed-income markets. We think it is crucial that ETFs are assigned to liquidity bands reflecting adequately the liquidity level for the relevant instrument; we would therefore strongly advise to not only consider the highest liquidity band in Annex RTS 11 but as well to add (a) new liquidity band(s). A broadening of the tick size regime’s instrument scope could lead to a flight to OTC markets which are not subject to regime.

Market making regime – DBG agrees with ESMA’s analysis that the MiFID II/MiFIR market maker regime has contributed to a more stringent regulatory framework. While DBG agrees with the proposal to limit market making registration to continuous trading only where market making strategies are used, we do not support expanding the obligation to have market making schemes for all instruments and types of trading systems. DBG would thus disagree with requiring monetary incentives for non-liquid markets and with a fee incentive for only the best liquidity providers if it was compulsory. Rather, trading venues should have discretion to assess for which instruments and markets market making schemes make sense. DBG thinks that the existing flexibility and discretion that MiFID II offers to trading venues is crucial and has proven valuable, hence, we do also not see the need to provide further clarification for certain relevant concepts. DBG rather recommends removing the obligation for trading venues to offer market making schemes, as we believe that monetary incentives might have an insignificant impact on market maker behaviour under stressed market conditions as no incentives can compensate the risk of a bankruptcy. Market conditions rather than incentives drive market making behaviour.

Speedbumps – DBG thinks that venues which introduced asymmetric speedbumps such as our derivatives exchange Eurex provide sufficient information on their mechanism, ensuring close alignment with the NCA and market participants, and does not believe that further regulation in this aspect is required. Asymmetric speedbumps, like the Passive Liquidity Protection (PLP) introduced by Eurex, are contributing to fair and orderly trading conditions. The PLP provides a non-discriminatory market access to all participants through the use of functionality and aims to improve liquidity and the price discovery process of the order book. DBG believes that further regulation in this field is not required and rather encourages a continuous dialogue between the introducing exchange and the NCA. Further, Eurex currently has regulatory market making requirements, valid for all regulatory market makers, and on top commercial liquidity provider incentive schemes. However, we do not support the idea that venues which introduce asymmetric speedbumps should set tighter market making requirements, which would only increase entry barriers for new participants that want to familiarize with market making and build up respective IT capacities. Neither do we support the suggestion that such arrangements shall be prohibited for equity markets without evidence of any detrimental effect of speedbumps on EU equity markets. We rather believe that the current legal framework ensures a well-calibrated balance between allowing for innovation and the imperatives of market integrity and investor protection. DBG fully appreciates the dialogue with our NCA on the topic of speedbumps and in addition, we are keen to provide further empirical insights based on the recent findings of the Eurex PLP to various other stakeholders.

Public vs private data feeds – The synchronisation of our different feeds and in particular private fill confirmations and public trade messages has been carefully considered and implemented. DBG applies a public data first principle. Involved parties receive their trade confirmation slightly after via their private channels. We do not see the need for any policy change and would like to point out that as long as information on the sequencing of the public and private feeds is transparent and accepted by all participants, the sequence shall be at the discretion of trading venues.

DBG trusts that our comments are seen as a useful contribution to increase the functioning of the MiFID II/MiFIR requirements for algorithmic trading, and remain at the disposal of ESMA for any questions and additional feedback

<ESMA_COMMENT_ALGO_1>

Questions

Q1 : What is your overall assessment of the MiFID II framework for algorithmic trading, HFT and DEA?

<ESMA_QUESTION_ALGO_1>

DBG is generally supportive of the MiFID II framework for algorithmic trading and adjacent aspects. Furthermore, DBG believes that the MiFID II framework for algorithmic trading proved its efficiency over the last years. The definitions are clear and capture the types of various algorithmic trading manners. The risks associated with algorithmic trading are well addressed through the requirements and responsibilities of investment firms and trading venues stipulated by MiFID II on various layers. Please also see our response to Q2.

<ESMA_QUESTION_ALGO_1>

Q2 : In your views, are there risks other than the one mentioned in MiFID II or impacts on market structure developments due to market electronification/ algorithmic trading that would deserve further regulatory attention? Please elaborate.

<ESMA_QUESTION_ALGO_2>

DBG understands the regulator's concern regarding the potential risks associated with algorithmic trading. However, we believe that those risks were well addressed in the past in MiFID II/MiFIR and MAR legislative frameworks and implemented by trading venues on a) legal, b) functional and c) technical layers. Regarding a) legal layers, exchanges have absorbed the legislative and regulatory requirements into their comprehensive set of rule books, to which market participants need to adhere. On b) the functional layer, risk controls, circuit breaker mechanisms and limits such as excessive system usage fees or order to trade ratios (OTR) have been deployed or extended, for example. And further safeguards on c) the technical layer have been implemented or extended, like testing requirements, system resilience and capacity measures, etc., that proved their efficiency over the last years, and especially during times of high amounts of trading and volatility present in 2020 during COVID-19 crisis. All of those layers have worked in a harmonised fashion, to address challenges a trading venue and market participants are confronted with. To this point, we have not identified an entirely new development in algorithmic trading that would require dedicated focus.

<ESMA_QUESTION_ALGO_2>

Q3 : Do you consider that the potential risks attached to algorithmic trading should also be given consideration in other trading areas? Please elaborate.

<ESMA_QUESTION_ALGO_3>

No, DBG does not see any need for this as risks are well addressed. Please also see our answer to the previous two questions.

<ESMA_QUESTION_ALGO_3>

Q4 : Do you agree with this analysis? If not, please explain why.

<ESMA_QUESTION_ALGO_4>

DBG would agree with ESMA's view that DEA clients shall adhere to MiFID II requirements when applying algorithmic trading techniques. However, we believe that it shall be the responsibility of DEA providers with contractual relations to its client base, to clarify whether the clients are engaged in algorithmic trading and whether they adhere to this set of requirements. We would like to emphasise that the information regarding DEA clients is not and shall not in the future be available to a trading venue due to data protection reasons; we

would caution against this as the trading venue does not have contractual relationships with those clients and should not receive their data.

<ESMA_QUESTION_ALGO_4>

Q5 : Did you encounter any specific issue with the definition of HFT? Do you consider that the definition should be amended? Do you have any suggestion to replace the high message intraday rates with other criteria or amend the thresholds currently set in Level 2? Please elaborate and provide data supporting your response where available.

<ESMA_QUESTION_ALGO_5>

DBG did not encounter any issues with the definition of HFT. Overall, HFT criteria under MiFID II seem reasonable and well calibrated to capture this type of technological deployment and business model pursuit. The methodology and thresholds proved their efficiency over the last years, as it seems important for firms to have a high degree of transparency and predictability. We would not recommend any dynamic intraday calculation to be included as the general business strategy does not change overnight and the behavior of the trading participants are also stable over time and therefore, should be estimated over a certain period of time, and not be characterized by singular events. Twelve months as stipulated by MiFID II is considered adequate.

<ESMA_QUESTION_ALGO_5>

Q6 : Based on your experience, is sub-delegation of DMA access a frequent practice? In which circumstances? Which benefits does it provide to the DEA user and to the sub-delegates? Are you aware of sub delegation arrangements in the context of Sponsored access? If so, please elaborate.

<ESMA_QUESTION_ALGO_6>

DBG's trading venues permit their members to provide Direct Market Access (DMA) to their clients. However, we cannot comment on the question if sub-delegation of DMA is a frequent practice. The regulation does not foresee a legal relationship between trading venues and DMA clients. DBG only has a legal relationship with its DMA providers as they are members of the trading venues. According to Commission Delegated Regulation (EU) 2017/589, the information and responsibilities regarding DMA clients and its sub-delegated clients, therefore, lies with DMA providers and is not available at trading venue level.

<ESMA_QUESTION_ALGO_6>

Q7 : (for DEA Tier 1clients) Do you sub-delegate direct electronic access? If so, are your Tier 2 clients typically regulated entities/investment firms? Are they EU-based or third country based?

<ESMA_QUESTION_ALGO_7>

TYPE YOUR TEXT HERE

<ESMA_QUESTION_ALGO_7>

Q8 : Do you agree with this analysis? If not, please explain why. Do you consider that further clarification is needed in this area? If so, what would you suggest?

<ESMA_QUESTION_ALGO_8>

DBG believes that the relevant frameworks under MiFID II give a clear guidance of differentiation and concurs with the analysis by ESMA. According to MiFID II, and accompanying legislation, what is considered DEA shall be distinguished from the

arrangements where client orders are intermediated through electronic means such as, for example, online brokerage. To our view, further clarification would not be required. It seems sufficiently established that in case of DEA, the person transmitting the order to the trading venue can exercise discretion regarding the exact fraction of a second at which an order is entered, thus, has more control over the order and timing of its submission. While in case of intermediation, e.g. online brokerage, submitters of orders do not have sufficient control over the parameters of the arrangement, as providers take on the control by deploying certain filters, algorithms and arrangements for optimisation that as a consequence also add a certain amount of delay.

It is recommended to ensure this distinction provided by the current framework, and not mingle intermediated flow into the DEA definition.

Finally, DBG agrees that retail clients are not considered to perform investment activities on a professional basis.

<ESMA_QUESTION_ALGO_8>

Q9 : Do you agree with ESMA's proposal? If so, do you consider that the requirements considered above relevant? Should there be additional ones? If you disagree with ESMA's proposal, please explain why.

<ESMA_QUESTION_ALGO_9>

DBG supports ESMA's recommendation that the definition of algorithmic trading should apply to SIs and that key requirements at systematic internaliser (SI) level for OTC algorithmic trading should include governance arrangements for trading systems and trading algorithms, controlled deployment of algorithms and kill functionality and other risks controls. Given the role that SIs play in today's equity markets (approx. 20% market share) and the size of individual SIs (please also see ESMA's first annual report on securities markets) we consider it necessary for SIs to address the immanent risks attached to algorithmic trading, especially from an investor protection point of view. Investors need the trust that effective risk controls are in place in order to mitigate and address those risks in an appropriate and effective manner in particular during stressed markets conditions. Furthermore, given that business activities of SIs are to a large extent opaque, investors need the confidence that SIs follow regulatory standards.

<ESMA_QUESTION_ALGO_9>

Q10 : Do you agree with ESMA's proposals above? Please elaborate.

<ESMA_QUESTION_ALGO_10>

DBG welcomes the deletion of the exception to the exemption from authorisation as investment firm set out in Article 2(1)(d)(ii) of MiFID II for persons having DEA to a trading venue. This will ease the level playing field for EU and non-EU firms across the EU - for markets to which the exemption applies.

We agree with ESMA's view that the obligations and responsibilities relating to DEA providers, including under Article 17(5) of MiFID II, and Articles 22(3) and 23(2) of RTS 6 provide an appropriate and sufficient framework for addressing the risks of disorderly trading arising from DEA access to only deal on own account. DBG firmly believes that these requirements imply full responsibility of a DEA provider for the DEA order flow and guarantee meaningful controls over DEA users. Therefore, persons having DEA access to a trading venue while only dealing on own account shall be exempted from authorisation requirements.

However, DBG does not support the proposal to extend the definition of DEA users in order to include sub-delegated clients. Persons benefitting from the DEA sub-delegation (Tier 2 DEA client) should not be classified as DEA users in the MiFID II sense. Reverting to the legislative objective, to increase trading safeguards and accountability it seems reasonable to consider the immediate vicinity of a trading venue, interaction with its systems and regulations, and to ensure that the direct participant to a trading venue is in full control. Extending the chain to include further tiers does not seem reasonable from a trading perspective. We agree with ESMA's understanding that a Tier 2 DEA client would, in most cases, not technically be in possession of the trading code of the DEA provider. Therefore, we believe that a person who directly interacts with the member and uses its trading code, and who is explicitly authorised by the member to use it, should therefore be understood to have DEA to a trading venue and not a sub-delegated client.

Finally, DBG does not agree with the suggested amendment to Article 17(5) of MiFID II by including the number and names of entities to which DEA access is provided in an annual update. We do not think that providing the names nor the numbers is necessary. As outlined in our answer to Q6, trading venues do not have a legal relationship to DEA clients and hence do not have access to such information in the first place; rather this information is already available through transaction reporting by DEA providers and in audit trails on request by exchanges.

<ESMA_QUESTION_ALGO_10>

Q11 : Do you agree with ESMA's proposal? Please elaborate.

<ESMA_QUESTION_ALGO_11>

TYPE YOUR TEXT HERE

<ESMA_QUESTION_ALGO_11>

Q12 : Do you see merit in ESMA developing a template for notifications to NCAs under Articles 17(2) and 17(5) of MiFID II? If not, please justify your position.

<ESMA_QUESTION_ALGO_12>

DBG supports ESMA's attempts to standardize the templates for notifications to NCAs regarding DEA provisioning and engagement in algorithmic trading. This would increase clarity and achieve a harmonised approach. We would like to emphasise that such notifications shall stay very generic, as the level of detail requested should only be relevant to the NCA's requirements to understand the technologies used. We believe that point 84 on page 33 of the consultation paper is sufficient for the envisaged approach.

<ESMA_QUESTION_ALGO_12>

Q13 : Do you agree that it would be useful to clarify that notifications should be done 'without undue delay'?

<ESMA_QUESTION_ALGO_13>

DBG agrees that investment firms should submit the notifications according to Articles 17(2) and 17(5) MiFID II without undue delay. Although we think that this is widely acknowledged, such a clarification might be supportive in order to harmonize expectations on timing across NCAs.

<ESMA_QUESTION_ALGO_13>

Q14 : Do you agree with ESMA's approach for the exchange of information between NCAs? If not, please justify your position.

<ESMA_QUESTION_ALGO_14>
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<ESMA_QUESTION_ALGO_14>

Q15 : What is your view on clarifying the definition of algorithmic trading? If you deem it beneficial to refine the definition and account for further types of algorithms or algorithmic trading strategies, please provide your suggestion as well as underlying rationale.

<ESMA_QUESTION_ALGO_15>

DBG understands that there is a difference between various types of algorithms deployed in the market, and that ESMA therefore deliberates to consider a differentiation between those. However, the heterogeneity of algorithms and the fact that one trading algorithm might include several types of algorithms may create a complexity to allocate one to any of the group and thus, proper differentiation would be hard or in some cases impossible to achieve in practice, without a distinguishable upside. That is why we deem it necessary to classify every type as an algorithm in general, as stipulated in the current definition, which is broad enough to capture a variety of algorithms since it includes any computer determination of order parameters with limited or no human intervention. Further clarification and differentiation of the definitions may result in omitting certain types of algorithms. We therefore prefer to keep the current definition as it stands. Please also see our answer to Q16.

<ESMA_QUESTION_ALGO_15>

Q16 : Do you think there should be specific requirements for different type of algorithms or algorithmic trading strategies in RTS 6? Please explain.

<ESMA_QUESTION_ALGO_16>

Following our answer to the previous question, DBG believes that requirements for different types of algorithms would be hard to define in practice, without running the risk to exclude algorithms that should be included. We think that the legal framework and requirements currently defined by MiFID II/MiFIR as well as MAR are adequate to prevent disorderly trading or manipulative behaviour. All the algorithms have the same testing and certification requirements towards the trading venues and are well-managed by functional safeguards, such as risk controls and mechanisms such as excessive system usage fee or circuit breakers, for example.

<ESMA_QUESTION_ALGO_16>

Q17 : What is your experience with testing environments? Are they used frequently? If not, why? Do you see a need for any improvements?

<ESMA_QUESTION_ALGO_17>

DBG provides simulation environments the whole year. Members have the possibility to test frequently, and in particular in preparation for every release of the trading system, which takes place twice a year. Members can use the simulation environments for unassisted or assisted testing (e.g. focus days for special item testing and testing of fundamental cases, e.g. connectivity loss, high volatility) and execute testing according to their business models. DBG continuously makes improvements to its systems where deemed appropriate and by taking members feedback into account. Hence, we do not consider that any improvements are to be done. The current regulation provides sufficient clarity with regard to testing environments.

<ESMA_QUESTION_ALGO_17>

Q18 : Do you agree that the definition of “disorderly trading conditions” should be clarified? If yes, how would you define such trading conditions?

<ESMA_QUESTION_ALGO_18>

DBG agrees with ESMA’s opinion that there was no clear definition of the “disorderly trading conditions” in the past, that might have created confusion in practice. ESMA’s proposal for the definition for disorderly trading is a valid reference that is already acknowledged in market practice and shall be harmonised across regulations, e.g. Market Abuse Regulation. DBG thus agrees that the term “disorderly trading conditions” should be defined for all relevant Level 2 regulation in the same way. Hence what is considered to be “disorderly trading conditions” in RTS 8 for market makers should be equally applied in the Level 2 specifications for investment firms (RTS 6) and trading venues (RTS 7). Hence we agree that disorderly trading conditions should refer to a market where the maintenance of a fair, orderly, and transparent execution of trades is compromised. We do not necessarily think that a Level 1 amendment would be the best solution. Equally including the same definition into RTS 6, RTS 7 and RTS 8 would work.

<ESMA_QUESTION_ALGO_18>

Q19 : Do you agree that ESMA should provide additional guidance on the expectations concerning the checks and testing to be done, in particular for testing on disorderly trading conditions?

<ESMA_QUESTION_ALGO_19>

DBG believes that investment firms already set appropriate levels of checks and testing proportionate to the complexity of the firms’ algorithms. We therefore do not see the need for additional guidance on the expectations concerning the checks and testing to be done. The needs for testing facilities of trading venue participants are very heterogenous depending on their trading activities/behaviours. Their needs may vary depending if their business is agent, proprietary or riskless principal and what kind of trading strategies they apply such as for instance with the support of algorithmic trading or high frequency techniques. Hence pre-defined expectations on testing and checks would not cover the heterogeneity of algorithms and strategies applied by market participants.

So, DBG believes that in order to fulfil these needs of trading participants and allow investment firms to test, we provide simulation environments throughout the whole year. Members have the possibility to test frequently and in particular in preparation for every release of the trading system, which takes place twice a year. Hence, members can use the simulation environments to address their individual test cases. In addition, DBG went well with providing them with opportunities to have focus days for specific item testing and testing of fundamental cases (for instance connectivity loss, high volatility) and execute testing according to their business models.

<ESMA_QUESTION_ALGO_19>

Q20 : Would you agree that it could be beneficial if ESMA develops a prescribed format for the self-assessment foreseen in Article 9 of RTS 6?

<ESMA_QUESTION_ALGO_20>

TYPE YOUR TEXT HERE

<ESMA_QUESTION_ALGO_20>

Q21 : Do you agree with the changes proposed to the self-assessment of Article 9 of RTS 6?

<ESMA_QUESTION_ALGO_21>

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<ESMA_QUESTION_ALGO_21>

Q22 : Would you propose any other targeted legislative amendments to RTS 6? Please include a detailed explanation of the proposed amendment and of the underlying issue that this amendment would aim to tackle.

<ESMA_QUESTION_ALGO_22>

TYPE YOUR TEXT HERE

<ESMA_QUESTION_ALGO_22>

Q23 : Do you agree with ESMA's proposal to harmonize and create a clear structure for the performance of the self-assessment?

<ESMA_QUESTION_ALGO_23>

DBG would like to emphasise that so far DBG's approach to perform the self-assessment, which was based on the articles of the requirements and assessed compliance with those per article has worked well. We encourage ESMA to abstain from additional operational and compliance-related burdens that may arise from a potential change of the requirements, as the regulation is already clear on the content of the self-assessment. Further, DBG suggests deleting the annex as the purpose of the self-assessment is purely the assessment of compliance with the requirements of the Directive. Moreover, the format of the self-assessment is structured and shared with the relevant NCA(s) already. However, we understand that ESMA sees a lack of harmonized formats for the self-assessments across jurisdictions and would like to point out that in case a harmonized "structure" (possibly in the form of a template) will be provided in order to conduct the self-assessment in the future, trading venues should be given sufficient time in order to apply this new structure (format).

<ESMA_QUESTION_ALGO_23>

Q24 : Do you agree with limiting the self-assessment to every two years and to require trading venues to share it with their relevant NCA?

<ESMA_QUESTION_ALGO_24>

DBG supports ESMA's proposal to limit the requirement to conduct the self-assessment to every two years due to the fact that changes after one year are rather limited. DBG can confirm this based on conduction of former self-assessments. Please note that our self-assessments are already shared with our relevant NCAs since the implementation of MiFID II, and DBG thinks it is more than reasonable to continue this practice.

<ESMA_QUESTION_ALGO_24>

Q25 : Do you agree with ESMA's analysis about the overlapping requirements between RTS 6 and 7? Are those overlaps considered beneficial, should they be removed or are there any gaps? Are there any further points that should be clarified?

<ESMA_QUESTION_ALGO_25>

DBG agrees with the analysis. The "overlapping" requirements are beneficial as they clearly outline the respective responsibilities of investment firms and the ones of trading venues to ensure proper testing. To our understanding it is less of an "overlapping" but a reflection of the mirror on the requirements where market participants and trading venues interact. Therefore, we do not see the need for any changes.

<ESMA_QUESTION_ALGO_25>

Q26 : What is your view with regards to the testing of algorithms requirements? Do you agree that more robust testing scenarios should be set?

<ESMA_QUESTION_ALGO_26>

DBG does not fully support ESMA's intention to clarify the requirements for testing of algorithms as we think that the current testing requirements for algorithms are sufficient. We therefore disagree with having more testing scenarios set by the regulator. We would rather like to call for a tailored approach to the business model of an investment firm, strategies it performs and different products it trades, while avoiding additional operational and compliance burden when considering providing further guidance. Trading venue participants are very heterogeneous due to their business models and trading behaviour resulting from different customer base and also trading strategies being applied. A pre-defined testing approach does not reflect this heterogeneity. In order to serve the trading participants' heterogeneity best we believe that simulation environments should be provided throughout the whole year. These are running analogous in parallel to the production environments and hence provide the closest testing possibility to production. Members have the possibility to test frequently and in particular in preparation for every release of the trading system, which takes place twice a year. Hence, members can use the simulation environments to address their individual test cases. In addition, DBG went well with providing them with opportunities to have focus days for specific item testing and testing of fundamental cases such as for instance connectivity loss or high volatility. Hence a pre-defined testing approach is, therefore, not feasible.

In addition, as already envisaged by the regulation we would like to emphasize that testing should not only be conducted in the environment of a trading venue but can be done in firm's or third party environment depending on and addressing the individual needs of the investment firm.

<ESMA_QUESTION_ALGO_26>

Q27 : Are the testing environments available for the testing of algorithms appropriate for this purpose?

<ESMA_QUESTION_ALGO_27>

DBG is of the opinion that the simulation environments are very much appropriate in order to test sufficiently. While testing is separated from the production environment, our simulation environment reflects the production environment and enables participants to test those in close to real trading environment. Simulation environments are available the whole year throughout market hours and on request outside market hours. Besides own guided testing DBG offers focus days for special items testing before releases.

<ESMA_QUESTION_ALGO_27>

Q28 : Do you agree with ESMA's analysis that the circuit breaker mechanism achieved its objective to avoid significant disruptions to the orderliness of trading?

<ESMA_QUESTION_ALGO_28>

Yes, the volatility interruption mechanism at DBG's trading venues served its purpose efficiently and provided market participants time to process and digest new information in a smooth and efficient way, as DBG could observe in the past and in particular on the occasion of the Brexit referendum in June 2016 and during the COVID-19 crisis.

Despite worries over the corona virus generating insecurity on the market and thus high volatility which in turn implies high trading volumes, our system capacities have not been

reached and our safeguard mechanisms prevented disorderly trading. The recent peak in volatility in February and March 2020 and activity showed that the safeguards were effective and helped to ensure orderly trading on our trading venues. The safeguards mechanisms were extensively used allowing trading to continue without suspension of trading neither for specific instruments nor for the whole market. These mechanisms operated by trading venues have proven their valuable contribution to market resilience and stability during highly volatile and stressed market phases.

<ESMA_QUESTION_ALGO_28>

Q29 : Do you agree that the requirements under Article 48(5) of MiFID II complemented by RTS 7 and the guidelines on the calibration of circuit breakers and publication of trading halts under MiFID II remain appropriate? If not, what regulatory changes do you deem necessary?

<ESMA_QUESTION_ALGO_29>

DBG's trading venues have installed volatility interruptions in compliance with Art. 48(5) MiFID II, Art. 19 of RTS 7 and the ESMA guidelines on the calibration of circuit breakers and publication of trading halts under MiFID II (ESMA70-872942901-63) as well as the national implementation. We indeed agree that the requirements as they are currently set are adequate and sufficient and that regulatory changes are not necessary.

MiFID II grants discretion for market operators to determine the actual set-up and calibration of their mechanisms and to adapt parameters to instrument-specific trading patterns and market characteristics as needed. This regulatory set-up, combining a comprehensive legal framework and market operators' discretion on the actual design of the mechanisms, results in a market environment that effectively contributes to ensure price quality and financial stability. In practice, DBG is continuously monitoring and reviewing its trading safeguards to ensure that these continue to meet highest market standards.

Moreover, we would like to state again that further requirements are not necessary and would prove counterproductive. Trading venues shall keep the ability to define their safeguard mechanisms with sufficient degree of freedom. The discretion of trading venues for volatility interruptions should not be limited when it comes to the functional design, application and interplay of these measures that are designed and operated to protect the price discovery process and to avoid significant disruptions to the orderliness of trading.

Additionally, we strongly object to any proposal interlinking markets like the suggestion that trading venues must be able to halt or constrain trading in case of significant price moves on related markets. In practice, if prices of two related instruments are highly correlated and it is therefore likely that a volatility event on the spot market follows a volatility event in the derivatives market, the safeguards operated by each market will still ensure that effectively both markets switch to a volatility interruption. If in turn the prices are independent or the anomaly was incidental and to one trading venue only ("local" liquidity imbalance), it is also not justifiable to have volatility interruptions on both markets.

As a "natural" interlinking of markets (by correlation or transmission of price changes) proves obvious, we would also object to an "artificial" linkage of markets for different reasons. First, it requires large technical efforts to trigger a volatility interruption based on trading activity on a different market. Volatility interruptions are designed to react to price jumps in real time and they usually last for only a few minutes. Second, while the start of the volatility auction phase is just a technical burden to coordinate, the reopening of markets, which, to be consistent, needs also to be coordinated, will impose the problem of which market "leads" all related markets and

still adheres to all given time settings for the respective safeguards in the different markets. Third, there would be a need for a detailed list of markets and their relation based on instrument level to ensure that all related instruments and markets act in concert. Fourth, handling of volatility interruptions currently involves human intervention, while a world-wide approach would not allow for that.

On a different level, we do not see the economic advantage to install costly communication or coordination channels between venues. Market structure in Europe is more prone to “local” rather than “global” events and coordination is not justified. It might to the contrary have a self-fulfilling effect: an ex-ante local event results in a global event following a generalized halt of markets which would have otherwise remained individually event-proof.

<ESMA_QUESTION_ALGO_29>

Q30 : Do you agree that the co-location services and fees structures are fair and non-discriminatory? Please elaborate.

<ESMA_QUESTION_ALGO_30>

DBG is of the opinion that co-location services are fair and non-discriminatory as same conditions do apply for the same co-location services to all members equally without restriction and connections are monitored to ensure non-discriminatory treatment of market participants. DBG’s offering is transparent as scope and prices are published. FWB publishes the information about services and related prices on its webpage <https://www.xetra.com/xetra-en/technology/co-location-services> and Eurex on <https://www.eurex.com/ex-en/technology/co-location-services>.

Article 1(d) of RTS 10 is applicable to DBG as we have the co-location provider Equinix in order to offer this service to trading participants. DBG only provides and maintains the connectivity between the backend infrastructure to the trading participants installations. Equinix is the co-location provider and is in a separate contractual relationship with the co-location customers (i.e. the trading participants) regarding rack space and related services.

DBG offers to all co-location customers access to the network under equivalent conditions. Equinix is in charge of space, power, cooling and offers this under equivalent conditions to all co-location customers. Hence, non-discriminatory treatment of all co-location services is provided and there is no bundled service.

DBG’s fee structures and rebate schemes are fair and non-discriminatory.

For example, fee structures and rebate models at Eurex are made available in full detail in the Price List that includes liquidity provisioning and volume rebates for listed derivatives. The Price List describes all transaction fees in a transparent manner and is publicly available on the Eurex website at <https://www.eurexclearing.com/clearing-en/resources/rules-and-regulations/Price-list-32640>. Fee structures and rebate models at Frankfurt Stock Exchange are regulated via the “Price List for the Utilization of the Exchange EDP of FWB Frankfurt Stock Exchange” and the “Xetra Liquidity Provider Programme Agreement”. These documents describe all transaction fees and rebates granted in a transparent manner and are publicly available on the Xetra website at <https://www.xetra.com/xetra-en/trading/trading-fees-and-charges>.

<ESMA_QUESTION_ALGO_30>

Q31 : Do you think that the disclosures under RTS 10 made by the trading venues are sufficient or should they be harmonized among the different entities? Please explain.

<ESMA_QUESTION_ALGO_31>

DBG is of the opinion that the disclosures of services required by RTS 10 are sufficient as the total service scope and related prices are published on the webpage.

We would like to further emphasise that the discretion should be left to the trading venues to provide service and fee disclosures themselves due to the fact that different venues may have different services and herewith the need to describe them individually. Harmonization in this regard would be difficult to achieve in practice.

<ESMA_QUESTION_ALGO_31>

Q32 : Do you agree with ESMA's proposal to set out the maximum OTR ratio, calibrated per asset class?

<ESMA_QUESTION_ALGO_32>

DBG does not support a convergence of maximum OTR ratios as proposed by ESMA. A certain instrument/product might need different limits on different exchanges - thus, comparing those limits provides no indication of any dysfunctionality of the OTR concept and a maximum limit chosen by ESMA would therefore not provide any benefit or improvement to the market. In essence, even with similar maximum limit methodologies at all exchanges, the maximum OTR limits are not only a function of the exchange's own IT capacity as well as the respective instrument/product type, but more so of the trading characteristics of every single instrument/product where and how it is traded. This implies that even similar instruments/products may have different message requirements depending on where they are traded. Market making activities vary tremendously between different EU countries and between asset classes per se. For example, a certain asset class has rather moderate liquidity on a trading venue. The market makers can serve this market with a moderate activity, whilst this asset class is highly liquid on another trading venue and those market makers need much higher ratios in order to serve the market sufficiently. Imagine an instrument/product that is traded among various venues, where one venue is considered the home (national) market aggregating most of the liquidity for a specific instrument/product, while other secondary markets only have a small amount of market maker quoting these products. Although, the instrument/product is similar, the market makers on the secondary market require many more messages to quote identical prices as they have to mirror all price movements on the home market – in the worst case, mirror all messages from all market marker of the home market. Also, such a situation might change over time – an instrument/product with decreasing liquidity at one venue might need to increase OTR limits to ensure a continuation of orderly quoting and might need to increase OTR limits over time.

Moreover, pre-defined maximum OTRs by ESMA would not take into account the variety of trading participants and heterogeneity of different markets across the EU with the consequence of negative effects on the natural trading behaviour of the market participants. For example, an online broker serving retail clients has a different trading activity than a regional bank or an investment bank, market maker or an HFT. Whilst the same OTR ratios across all markets in the EU may not be harmful for some markets (as these calibrated OTRs might just as well fit those particular markets), it may have detrimental effects for other markets and hence may affect trading behaviour of participants and cause competitive distortions among trading venues. DBG determined the maximum ratios by analysing the trading activity of all trading

participants per asset class. Maximum ratios were set in a manner that outliers were going to be penalized but that regular trading activity of the trading participants would not artificially be impacted.

Lastly, as alluded to above, the purpose of the number OTR based ratio is to safeguard the capacity of a trading system. Trading systems differ across venues regarding what capacity they can handle. Some venues have highly sophisticated state of the art trading systems that are capable of managing higher capacities than others. Now with pre-set limits those state-of-the-art trading systems would be unnecessarily and artificially restrained in their potential. We do not see any value added given that these trading systems have effective measures and tools to monitor and supervise such capacity levels (alerts, throttles etc.).

From a commodity markets perspective, the proposal of ESMA of having a single value does not take into account the different characteristics of commodity markets and could lead to unnecessary market failures in extreme market situations. For example, electricity and gas are prone to certain fluctuations due to outages or simply seasonal price peaks. It could lead to distortions if companies that have to mirror these fluctuations (e.g. market makers) in order books have to stop because of the proposed figures, which is then also a disadvantage for members who want to hedge against price risks. It is also very common that the volatility and liquidity is very different between commodities depending on the market. Therefore, a one-size-fits-all approach will not work.

To conclude, the determination of maximum OTR ratios should remain in the responsibility of each trading venue.

<ESMA_QUESTION_ALGO_32>

Q33 Q33: Do you agree that the maximum limits are not frequently exceeded? Please explain any potential underlying issues in this respect that should be recognised.

<ESMA_QUESTION_ALGO_33>

DBG can confirm that the maximum limits have not been frequently exceeded. We do not see any underlying issues with this observation. DBG is of the opinion that this is the result of a profound analysis and subsequent determination of limits. The implementation of the national regulation was made on the basis of several analysis and took into account the peculiarities within different asset classes which we have explained in our answer to Q32. For DBG's trading venues the limits were determined by analysing the trading activity of all trading participants per asset class. Maximum ratios were set in a manner that outliers are going to be penalized but that the regular trading activity of the trading participants is not artificially affected. The aim of the OTR regime to guarantee market integrity and system resiliency, whilst not artificially influencing the regular trading behaviour of a very heterogeneous trading participant base and different liquidity in asset classes.

From the venue's perspective, the OTR is, therefore, considered a last line of defence to impose message limits to trading participants. As trading venues, we apply intraday system throttles as well as excessive system usage fees that will warn and eventually slow down trading participants from reaching the OTR limits. In addition, multiple trading participants have set up their own monitoring systems to control message flow on an intraday level in order to avoid violations pre-emptively. Furthermore, as the consequences for market participants can be penalized, generally market participants are very cautious on the OTR compliance.

<ESMA_QUESTION_ALGO_33>

Q34 : Do you agree with the consequences as described of exceeding the maximum limits or should there be a more convergent approach? Please provide any comment or suggestion regarding the procedures in place by trading venues in case of a member exceeding the prescribed limit.

<ESMA_QUESTION_ALGO_34>

DBG agrees with the consequences as described. We do not think that a more convergent approach is useful when it comes to exceeding the maximum limits as we believe that the current process works fine. For its trading venues, DBG transposed the OTR regime into the respective Exchange Rules of its venues. In case of a breach of the maximum OTR ratios, Trading Surveillance informs the respective Management Board of the respective exchange and afterwards as well the Exchange Supervisory Authority. Eventually the Sanctioning Committee of the respective venue will be informed which then will decide on the following: send out a warning, request a penalty fee or may even exclude the trading participant temporarily from trading on our systems.

Most market participants, therefore, already monitor their OTR ratios on an intraday basis at our systems in order to avoid exceeding the limits and more often reduce quoting activity in case they approach the maximum limit. DBG also provides daily reports for Eurex and FWB venues that help trading participants to monitor and hence remain compliant.

<ESMA_QUESTION_ALGO_34>

Q35 : Do you agree with the need to improve the notification process in case of IT incidents and system outages? Beyond the notification process between NCAs and ESMA, which improvements could be done regarding communication of incidents to the public?

<ESMA_QUESTION_ALGO_35>

DBG acknowledges that swift incident communication is of importance for oversight authorities. In case of an IT incident/outage, trading venues of DBG are informing their respective NCAs as swiftly as possible based on a well-established procedure and in accordance with their legal notification obligations. Therefore, we do not see the need for streamlining notification procedures from trading venues to NCAs and ESMA in case of incidents by way of supervisory convergence measures.

DBG also acknowledges that swift incident communication is paramount for the trading community. DBG has therefore established a standardized and reliable process of communication in case of IT incidents/outages. DBG has put in place a dedicated process, which enables streamlined and efficient incident communication to customers over multiple channels. This enables transparency for market participants as well as the wider public if an incident occurs. Our standardized process has received general approval by DBG's trading participants being considered streamlined, efficient, and timely. Nevertheless, DBG is always looking at ways to improve its processes. We are therefore continuously in close dialogue with our trading members.

DBG reckons that trading venues need to keep a certain degree of discretion in addressing incidents based on best practice and in line with the existing legal requirements. We would however be open for sharing best practice and aligning on core aspects of communication in case of an outage via industry standards.

Finally, we would also like to highlight that information and communication procedures in case of an IT incident are addressed within the recent proposal of the European Commission on a Regulation on Digital Operational Resilience (DORA). We welcome that DORA aims at introducing a consistent and streamlined approach for the financial sector towards IT incident classification, notification towards authorities, and communication to customers and the public with a view to increase the efficiency of current communication procedures and the resilience of the overall ecosystem. This also includes the establishment of information and coordination procedures between relevant authorities on national and EU level.

Trading venues already comply with Articles 47 and 48 of MiFID II requiring effective systems and procedure to ensure their systems' resilience and orderly trading, also under stressed market conditions. These provisions will have to be assessed against the new DORA standards once applicable. Hence, we do not think that any additional guidance to the MiFID II/MiFIR framework are necessary to adapt the current notification and communication procedures.

<ESMA_QUESTION_ALGO_35>

Q36 : Do you believe any initiative should be put forward to ensure there is more continuity on trading in case of an outage on the main market, e.g. by requiring algo traders to use more than one reference data point?

<ESMA_QUESTION_ALGO_36>

No, DBG believes that there is no need to put forward such an initiative. First of all, the availability of DBG's T7 trading systems is indeed extremely high. For example, for T7 XETRA the availability was 99.82% in 2020 and 100% in 2019. So, we do not have the impression that continuity of trading on main markets is endangered.

Further, given a close to 100% system performance of main markets we do not see any reason for investor protection concerns. However, we have noted that the availability of other platforms such as online brokers have recently raised the attention of national supervisors. During the recent Gamestop shares hype some platforms faced problems in dealing with the huge amount of client orders and halted trading as a result. This led to a number of complaints of retail investors at the supervisory authority, and authorities requiring the online brokers to ensure full provision of services in accordance with the legal requirements and without disruption. They will further investigate technical reasons for the halt of trading, responsibilities and decisions taken by those platforms. Should ESMA see the need to assess the impact of any outages or incidents, we would welcome a comprehensive assessment including the system performance of all available trading systems.

We would very much caution ESMA against unforeseen consequences of requiring algorithmic traders to use more than one reference data point. By forcing algorithms to include different sources of information, the underlying assumption is that regulated markets, MTFs and potentially SIs are set on the same level in terms of price formation and information, with easy switch from one to the other, putting aside respective market shares and the notion of reference market, let aside violations of best execution policies. The explored initiative would hence introduce an artificial change to the current market structure which is at odd with MiFID and the motivations for the introduction of alternative venues in the first place, lacking of assessed impact on the distribution of pools of liquidity in the EU.

The height of volatility in the COVID-19 crisis is a good example of the importance of transparent markets and the flight to execution quality in the event of market turmoil. It proved

once more that there was a need by investors to trade on regulated markets when looking at the migration of volumes from dark, SI, and OTC trading to lit regulated markets. In January 2020, i.e. before any impact of COVID-19 on European cash equity trading volumes, the market share in DAX30 for Xetra was 38.4%. In February and March 2020, during the most significant COVID-19 impact, on the five most active trading days in DAX30 the Xetra market share in DAX30 was up to 48.4%. Explanations for this are rather simple: regulated markets are safe, reliable but they also provide the transparency and the immediacy needed by investors in times of high volatility.

Moreover, we believe it is important that regulators and policymakers are mindful of the fact that also other initiatives for continuity of trading currently discussed in the market would not remedy the underlying problems around market fragmentation and different levels of contribution to price formation. We would therefore be cautious to assume that a consolidated tape could serve as a helpful mean to continuously provide reliable references. As of today, trading venue data is already available in a consolidated form by many market data vendors as well as third party providers be it in feeds and/or front-end trading solutions. However, there is not yet a fully comprehensive consolidated view of the market due to lack of off-venue data. A consolidated tape will not provide correct and reliable references, unless the lack of off-venue data quality has been solved directly at the relevant source. Furthermore, we would like to point out that the latency a consolidated tape would introduce would be considered problematic for a significant part of algorithmic trading. Last but not least, robust price-formation results from true interaction of buyers and sellers in public markets, and cannot rely on artificially linking price-referencing markets which are not equally accessible for all market participants.

Finally, we would like to emphasise that it should be up to market participants to decide if they see merit in connecting to additional reference data points. We believe that the decision incumbents market participants as a result of a costs/benefits analysis on their side, but shall not be made mandatory by regulatory requirements.

<ESMA_QUESTION_ALGO_36>

Q37 : Do you agree with the view that the tick size regime had overall a positive effect on market depth and transaction costs?

<ESMA_QUESTION_ALGO_37>

DBG has conducted an impact assessment of the tick size regime on Xetra instruments for Q4 2017 and Q1 2018, before and after the regime entered into force. A comparison of spreads between both periods, at touch and for a EUR 25k orders, does not indicate that the tick size regime had a positive effect on market depth and transaction costs. We only observe an expected mechanical effect related to tick size changes.

Our results on spreads are consistent with the expectations and those from the AMF analysis: larger tick sizes lead to larger spreads and smaller tick sizes lead to smaller spreads. The control sample (no change in the tick size) showed as well some changes in spreads (results were not controlled for volatility or market activity) (see AMF, “MiFID II: Impact of the new tick size regime after several months of implementation”, Risks and Trends, Feb 2019). DAX instruments with a decrease in tick size on 1 January 2018 saw their average spread reduced from 4.1 to 2.8bps, whereas DAX instruments with an increase in tick size had an increase in average spread from 3.2 to 4.8bps. The control sample exhibits a slight increase (3.5 to 3.7bps).

MDAX instruments with a tick size increase experienced as well wider average spreads from 7.4 to 9.8bps, while the control sample also experienced an increase from 8.3 to 9.3bps.

Taking the depth into account, the spread at EUR 25K (or cost of a EUR 25K aggressive transaction) is consistent with the results at touch: the cost of trading DAX instruments increased for instruments with a widertick size (4.0 to 5.6bps), increased slightly for those with an unchanged tick size (3.9 to 4.1bps) and decreased for the shares with a smaller tick size (4.4 to 3.2 bps). Our results differ however from those on the French market since the increase in costs was more pronounced for less liquid shares (the opposite is observed for Euronext Paris).

Moreover, our results differ from the AMF analysis on the median lifetime of cancelled orders: independently of potential changes in the tick size, the median lifetime of cancelled orders (defined as the median of the time difference between the time the order was entered and the time it was deleted by the owner) dropped for all DAX instruments between Q4 2017 and Q1 2018 and of a similar magnitude across all samples (smaller, larger and unchanged tick sizes). For less liquid instruments however (MDAX and SDAX) there is indeed an increase in the median lifetime of cancelled orders by a factor below 2. On Euronext Paris it appears to the contrary that the median lifetime of cancelled orders remained largely unchanged for the CAC 40 and increased by a factor 9 for the less liquid stocks. The average transaction size did also vary as can be expected from a change in tick sizes: we observe a larger average transaction size for DAX instruments with a larger tick size and a smaller average transaction size for DAX instruments with a smaller tick size.

Hence the impact of the new tick size regime is consistent with the mechanical effects of a change in tick size on Xetra. Moreover, the effects are more pronounced for more liquid stocks: larger tick sizes mean more competition at each price level between market participants which translates into larger transaction sizes and longer order lifetime (less flickering) but also higher costs measured in spread and depth. We would recall that 80% of the DAX, SDAX and MDAX instruments have experienced an increase in tick size, which would tend to indicate an increase in trading costs under the new regime.

<ESMA_QUESTION_ALGO_37>

Q38 : Is there any further issue you would like to highlight regarding tick size regime?

<ESMA_QUESTION_ALGO_38>

DBG would like to underline that it is crucial that the tick size regime is applied uniformly across jurisdictions and followed by all execution venues. We noticed that the Level 3 Guidelines in respect to frequent batch auctions (FBAs), for example, are applied differently across jurisdictions. Notwithstanding the fact that the UK is outside of the EU, the FCA has declared that “transactions executed off-tick at the mid-price are permissible when required by the auction algorithm used by the FBA”; this means that pegged orders to the midpoint are allowed unconditionally and that executions can take place at subticks (see the “Supervisory Statement on the Operation of the MiFID Markets Regime after the end of the EU withdrawal transition period”, FCA, 16 December 2020). On the contrary, in compliance with the ESMA guidelines, some EU NCAs have forbidden midpoint order pegging. Although we understand that Level 3 regulation is not mandatory, we believe that in order to avoid any future distortion within the EU which is detrimental and anti-competitive, the Level 3 measures shall be moved to Level 2. In general, we would advise against exemptions to the tick size regime. Executions at midpoint if fall on a sub-tick are currently allowed if the trade size exceeds the large in scale threshold, be it for SIs or trading venues. Any amendments to the current regulation shall be done in the spirit of a level playing field and assessment of potential impact on the market structure.

On a technical level, and referring to the FITRS database, we would also like to mention that:

- The most relevant market in terms of liquidity (MRMTL) can only be a trading venue, as per Article 4 RTS 1. We have overtime observed numerous instances where SIs have been selected as MRMTL by FITRS/FIRDS. We would suggest that ESMA implements checks to verify, based on the MIC code, that the MRMTL is effectively a trading venue.
- The first day of trading entered by trading venues must be a correct date and checked by ESMA. We have observed that some venues have reported the first day of trading for an instrument as being one week before the IPO.
- We would request that ESMA publishes the field “Calculation Time” for the different MiFID II parameters in the full ECR files and delta files, the same way they are provided on the ESMA register website. This information is crucial and allows trading venues to select the correct information to use in their systems when more than one data is published for the same calculation period (which is particularly relevant in case of half year updates).

We would also bring ESMA’s attention on the frequency of calculations updates. As per RTS 11, those occur once a year, in April and are based on the values from the previous year. We believe that an update half year could be beneficial to reflect changes in liquidity, especially since RTS 11 specifically prohibits changes at the request of the competent authority (see as well Question 5 of ESMA Questions and Answers on MiFID II and MiFIR market structures topics, ESMA70-872942901-38) even in the case of a change impacting adversely the liquidity of the relevant instrument, corporate actions aside. This half year adjustment is particularly crucial this year, with Brexit and changes competent authorities and subsequent calculations for thousands of shares (see our response to Q39).

<ESMA_QUESTION_ALGO_38>

Q39 : Do You agree with the proposal not to amend the tick size regime for third country shares? Please explain.

<ESMA_QUESTION_ALGO_39>

DBG appreciates that RTS 11 was amended to allow tick size adjustments for non-EU shares and this very quickly after MiFID II entered into force. While we do reckon the argument provided by ESMA that illiquid shares (less than one transaction per day on average) shall not be eligible to an Average Daily Number of Transactions (ADNT) adjustment, we would still point at the inconsistency between the definition of third country shares (shares with their main pool of liquidity located outside of the EU) and the definition of non-EU shares (shares with a non-EU27 ISIN) suggested by ESMA in their “MiFID II/MiFIR Review Report on the transparency regime for equity and equity-like instruments, the double volume cap mechanism and the trading obligations for shares” to apply for Article 23 MiFIR. Acknowledging the wording difference, we would still consider that any share considered as non-EU shall be eligible to an adjustment of their tick size, provided that liquidity is higher outside of the EU. This would remove the “more or equal to one transaction per day on average” criterion which is ad hoc and prevents de facto liquidity to develop in the EU for the relevant instrument. The criterion of the main pool of liquidity located outside the EU would still remain as it would guarantee that the tick size regime applying to those non-EU shares reflects one of the dimensions in RTS 11, namely the liquidity of the instrument.

The case of Brexit does illustrate the limitation indeed of the “main pool of liquidity located outside the EU” combined with the “less than one transaction per day on average” criteria. On 1 January 2021, the EU had to redistribute the status of competent authority and most relevant market in terms of liquidity (MRMTL) for more than 4,270 instruments from the UK to an EU

country, translating in the recalculation of MiFID II parameters including the ADNT for the determination of tick sizes. For more than 2,750 instruments this meant that the level of liquidity of the instrument with the MRMTL located in the UK could not be matched with the level of liquidity on any trading venue in the EU. Another 1,000 instruments where the main pool of liquidity is located outside of the EU saw an increase in their tick size without the possibility to be adjusted in March 2021; the reason being an EU ADNT now below 1.

Regarding this specific year 2021 and Brexit, we would urge ESMA to consider a recalculation of the MRMTL and the ADNT mid-2021, based on the first six months of the year, and to apply until the next yearly calculations applying in April 2022. This would allow some realignment with the current flow dispersion and redistribution between trading venues in the EU and the switch in market shares observed in January 2021 from UK venues to their entities in the EU. This would hence ensure that the MiFID II parameters reflect the real level of liquidity in the EU for EU shares and would as well allow for the adjustment of third country shares to their level of liquidity outside of the EU thanks to an ADNT above or equal to one.

<ESMA_QUESTION_ALGO_39>

Q40 : Do you agree with the proposal to widen the scope of the tick size regime to all ETFs? Would this pose challenges in your view? Please explain.

<ESMA_QUESTION_ALGO_40>

Albeit the fact that DBG supports a harmonised tick size approach across all ETFs and all execution venues, we do very much urge the regulators to consider the challenges raised by a one-fits-all solution, initially designed for shares and which will undoubtedly have negative impact on market participants and end investors. DBG strongly advises ESMA to not only consider the highest existing liquidity band in RTS 11 Annex but also to add at least one additional liquidity band to cater for the liquidity level of ETFs (equity and non-equity) currently traded in the EU.

First of all, the current tick size regime defined in RTS 11 was calibrated to match the liquidity profile of equities. This approach does not fit ETFs which track a broad range of underlying markets, including fixed-income markets. DBG analyses have shown that the highest liquidity band of the RTS 11 Annex (LB6) is not suited to adequately reflect the liquidity profile of a large number of bond ETFs, and even more so, money market ETFs. For example, most money market ETFs on DBG's trading venue Xetra currently trade with a tick size of 0.001 EUR. Under LB6, the tick size of those ETFs would increase from 0.001 EUR to 0.02 EUR at current price levels, i.e. an increase of 1,900 per cent; such an increase will result in a significant spread increase deterring investors from continuing to trade these products on a trading venue. The same holds generally true for fixed-income ETFs, albeit to a lesser extent compared to money market ETFs.

Secondly, while LB6 is well-suited to match the liquidity profile of most equity ETFs, it fails to provide sufficient price formation flexibility for the most liquid equity ETFs in Europe. This applies to both highly liquid equity ETFs already subject to the tick size regime as well as highly liquid equity ETFs that currently do not fall under the scope of the tick size regime, but would become subject to it under the proposed widening of the scope. The negative impact on price formation by tick sizes that do not adequately reflect the liquidity profile of the respective ETF can be observed by analysing the impact of the initial application of the tick size regime on highly liquid equity ETFs at the beginning of 2018. As a consequence of the introduction of the tick size regime, average spreads on Xetra for the most actively traded ETFs that were assigned to a broader tick size increased significantly and so far failed to return to the lower levels observed before the introduction of the tick size regime (see our response to the ESMA

Amendment to Commission Delegated Regulation (EU) 2017/588 (RTS 11), July 2018). A similar effect can now be expected for those highly liquid ETFs that would become subject to the tick size regime under the proposed widening of the scope. Investors will have to bear the impact of these changes as implicit transaction costs will increase and trading ETFs will become less attractive compared to alternative financial instruments that provide exposure to the same underlying, but are not subject to a tick size regime, such as derivatives.

Lastly, in the absence of a share trading obligation for ETFs, a broadening of the tick size regime's instrument scope would increase the attractiveness of OTC markets which are not required to apply the tick size regime. Since market participants are not restricted from executing ETF trades on OTC markets in a similar way they are for shares, market participants could benefit from price improvements by moving away from venues subject to the tick size regime. The same holds true for European trading venues located outside the EU which may not implement the proposed tick size regime in order to realize a competitive advantage. The impact would be particularly significant for those ETFs that have price formation constrained by their tick size, i.e. fixed-income, money market and highly liquid equity ETFs.

Hence, and in order to avoid the negative impact on specific groups of ETFs as outlined above, we would urge ESMA to consider adding one or more additional, more granular liquidity band(s) to the highest liquidity band of the Annex of RTS 11 and define a methodology for assigning ETFs to those liquidity bands where price formation is constrained by the tick size of LB6. DBG would be happy to contribute to an industry working group developing standards for the assignment of ETFs to these liquidity bands.<ESMA_QUESTION_ALGO_40>

Q41 : Do you agree with the proposal not to widen the scope of the tick size regime to non-equity instruments? Please explain.

<ESMA_QUESTION_ALGO_41>

DBG does agree with the proposal not to widen the scope of the tick size regime to non-equity instruments. We do not consider that the main argument for the implementation of a tick size regime for shares, namely the race to bottom, does apply for non-equity instruments. It might encourage more flow to go OTC in order to avoid the constraint of trading according to specific minimum price increments. In the case of bonds for instance, the significant share of the flow traded off exchange would escape any non-equity tick size regime rendering the latter inefficient.

<ESMA_QUESTION_ALGO_41>

Q42 : Do you agree with ESMA findings and assessment of the current MiFID II market making regime?

<ESMA_QUESTION_ALGO_42>

DBG agrees that MiFID II and the requirement to register as a market maker has contributed to a more stringent regulatory framework.

With the entry into force of MiFID II, DBG confirms the registration of 20 market makers on our Cash Markets systems who are currently active in 1,861 instruments. The type of instruments in which market makers are registered on our Cash Markets systems varies significantly from one asset class to another. 80% of these instruments are equities and 19% belong to ETFs, while ETCs and ETNs are less present.

In addition to the regulatory framework for investment firms to register as market makers, DBG Cash Markets offer the Designated Sponsor Program for market makers who agree to meet higher requirements, such as a minimum of 80% presence in auctions and continuous trading

and 70% presence during volatility interruptions. The aim of the Designated Sponsor program is to improve liquidity provision, particularly in less liquid instruments. Currently, 38 Designated Sponsors are active in 2,657 instruments on Xetra.

Looking at the liquidity of the instruments, the presence of market makers can be observed mainly in liquid instruments and less in illiquid instruments. In contrast, Designated Sponsors are particularly active in illiquid equities as well as in ETFs, ETCs and ETNs.

Based on the definition of continuous auction order book trading, DBG Cash Markets have implemented the market making regime on the trading venue Xetra with the market model "Continuous Trading with Auctions". As stipulated in the Exchange Rules of the Frankfurt Stock Exchange, every trading participant pursuing a market making strategy on Xetra is required to conclude a market making agreement. DBG's Designated Sponsor program offers market makers an incentive on transaction fees for trades executed during stressed market conditions in the specified financial instruments as defined in Article 5(1) of RTS 8. The definition of stressed market conditions is linked to the increase in volatility of an instrument.

In regard to our derivatives exchange Eurex, the incentives are not limited to instruments in which market makers are active. A valid example would be volume rebates in our equity options, which are divided in three liquidity classes: most liquid gets less rebate than the least liquid product – this clearly incentivizes trading in less liquid products.

Also, because of adverse selection no incentive will overweight the risk in stressed market, thus, withdrawing from the market is inevitable.

To conclude: While we agree that the new market making regime brought more clarity into the market during normal conditions, DBG believes that monetary incentives might have an insignificant impact on market maker behaviour under stressed market conditions as no incentives can compensate the risk of a bankruptcy. Due to non-compliance with minimum requirements, market makers did often not benefit from incentives during Covid-19, even though they continuously provided liquidity to the market. Market conditions and contractual relationships with the issuers behind the financial instruments are the main driver of market making behaviour.

Last but not least, while DBG essentially agrees with ESMA's description and assessment of the MiFID II market making regime, there might have been a mistake with the analysis of market makers. Figure 15, showing a volume share of 0 % for Market Makers in Commodity Derivatives, C10 Derivatives and Emission Allowances, seems to be incorrect and furthermore inconsistent with figure 16.

<ESMA_QUESTION_ALGO_42>

Q43 : What do you think of ESMA proposals and suggested amendments to RTS 8? In your view, what other aspects of the market making regime require to be amended and how?

<ESMA_QUESTION_ALGO_43>

DBG supports ESMA's view to expressly limit the requirement of market making registration to continuous trading in the order book where there is no human intervention and, in particular, where market making strategies are exercised. Already as of now, such a limitation has been our understanding and DBG trading venues measure market making performance during "continuous trading" only.

However, DBG disagrees with extending the obligation to have market making schemes in place for all instruments and types of trading systems. Trading venues should have discretion to assess for which instruments and markets such schemes make sense and implement them accordingly. Also, the business decision on whether to be active in any product should be done by a market maker himself. For example, trading participants may trade only futures and not options, thus, will not be able to perform as a market maker in the latter ones.

Rather, DBG recommends removing the obligation for trading venues to offer market making schemes, as these have proven to be ineffective, especially in stress situations (please also see our answer to the previous question). As observed in March 2020, market makers have continuously offered liquidity even though they could often not benefit from incentives because they did not meet the requirements. Compensation from trading venues under market making schemes cannot cover the market risk a market maker is exposed to in stress situations.

In line with the above, DBG does not see value in requiring monetary incentives for non-liquid markets. Further, DBG would disagree with a fee rebate for only the best liquidity providers if it was compulsory to offer such schemes.

DBG believes that the objective of a trading venue should be to offer the most appropriate liquidity program for illiquid instruments such as SME securities. As alluded to above, monetary incentives for the best liquidity provider for illiquid instruments would not add value as the number of liquidity providers for most instruments is generally one. DBG recommends the issuer liquidity contract as a suitable instrument to improve liquidity. Liquidity providers in illiquid instruments act primarily on behalf of the company paying for liquidity provision, and the rebates that a trading venue can offer, even a 100% fee rebate, are seen only as an additional contribution.

Another amendment to improve quality in the market would be the option to allow market makers to use multi-level-two-sided quotes instead of a quote pair. The performance measurement to monitor market maker compliance used would take into account all of the market maker's flagged two-sided quotes and/or orders within the maximum spread and add them up to the quantity that meets the minimum obligation. This behaviour would improve spread quality in the market and enable market makers to post firm quotes with a tighter spread when volume is lower due to lower risk. However, we would propose to keep the flexibility to the trading venue to decide whether the above mentioned option is a valid one for its market.

<ESMA_QUESTION_ALGO_43>

Q44 : What are market participants views regarding the flexibility left in the MiFID II market making regime? Would you agree with ESMA further clarifying certain relevant concepts? If yes, which ones?

<ESMA_QUESTION_ALGO_44>

DBG thinks that the existing flexibility and discretion that MiFID II offers to trading venues is crucial and has proven valuable, in particular by defining the content of the market making agreement and the market making scheme. Today, DBG offers dedicated liquidity provision programs across all kind of financial instruments, liquid as well as illiquid, to improve spread quality and to decline implicit transaction costs for investors.

Trading venues differ in their models and products they provide as each trading venue must take into account the nature and scale of its trading environment, thus, the discretion to decide on the market making regime shall remain with trading venues. Any further restriction of

regulation would harm liquidity provision by decreasing the number of participants acting as market makers today. Therefore, we do not see the need in further clarifications.

<ESMA_QUESTION_ALGO_44>

Q45 : Could you please describe how Primary Dealers agreements are designed (number of designated Primary Dealers, transparency about investment firms having signed such agreements, typical obligations contained, etc...). Do you consider that Primary Dealers should be exempted from the Article 1 of RTS 8? Do you consider that this can introduce a regulatory loophole?

<ESMA_QUESTION_ALGO_45>

DBG does not see a need for amendments or clarifications to avoid conflicts between RTS 8 market making requirements and other contractual liquidity provision obligations.

At DBG systems there are no conflicts with other contractual liquidity provision obligations, and Primary Dealers are not active on our trading venues.

<ESMA_QUESTION_ALGO_45>

Q46 : Do you think that venues which introduced asymmetric speedbumps provide enough information regarding the mechanism used? If not, what additional information would be useful to disclose to market participants?

<ESMA_QUESTION_ALGO_46>

DBG thinks that venues that introduced asymmetric speedbumps provide sufficient information on their mechanism. As DBG's derivatives exchange Eurex is the only market who introduced an asymmetric speedbump for derivatives in the EU, we would like to share the introduction approach as well as the information disclosure to the market.

In terms of timeline and procedure, ahead of the implementation phase, Eurex conducted a wide consultation on the methodology and implementation approach with multiple members, trading associations as well as during multiple Eurex working committees held with market participants. Eurex ensured that all participants who wished to be involved in the design of the functionality were included in the process. During the IT implementation phase, Eurex shared insights on the implementation and the affected environments via technical release documentation, release notes as well as dedicated member communication via Key Account Managers. Please note that all relevant documentation is available at the Eurex website at <https://www.eurex.com/ex-en/trade/eurex-plp> and that the functioning of the mechanism has been added to the Conditions for Trading at Eurex Deutschland, which is part of the rules and regulations of Eurex.

Regarding the implementation phase, Eurex decided against a simultaneous activation of the speedbump together with the respective implementation release start but instead consulted with market participants on a feasible time schedule, pilot segments, configuration parameters like deferral time as well as performance indicators to measure market quality changes giving participants additional time to familiarize with the methodology. The testing environment via simulation was available after implementation and long before production launch. All implementation and activation steps were communicated to the trading participants via official communication measures. Furthermore, Eurex published additional documentation on the evaluations done to select parameters configuration as well as enhancements following participants' feedback. The information has been shared and aligned with the NCA and

approved by the Exchange Council, the exchange body that represents the market participants and decides on exchange rule changes.

<ESMA_QUESTION_ALGO_46>

Q47 : Reflecting on those mechanisms which allow liquidity providers to provide quotes that can be filled only against retail order flow, do you think that such mechanisms are beneficial in terms of market quality? Is there any specific aspect that you think should be further taken into account, also considering the type of instruments traded? Please specify the venue of reference and the type of arrangement discussed.

<ESMA_QUESTION_ALGO_47>

DBG does not offer a functionality as described in Q47, however, we understand the concept and the targets of such a proposal. Splitting liquidity provision where both liquidity pools serve disjoint market groups helps offering retail order flow a better liquidity picture by reducing the risk of adverse selection for the liquidity provider. Eurex Passive Liquidity Protection (PLP) was designed with the same goals, however, the key consideration here was to improve the liquidity picture so everyone can trade against liquidity provider quotes, not only agents. However, since Eurex has no empirical insights on how such a mechanism as outlined in Q47 affects liquidity provision, we cannot contribute more insights to this point.

<ESMA_QUESTION_ALGO_47>

Q48 : Do you think that venues which introduce asymmetric speedbumps should set tighter market making requirements? Please explain why and how tight those new requirements should be.

<ESMA_QUESTION_ALGO_48>

Eurex currently has regulatory market making requirements, valid for all regulatory market makers. On top, Eurex has commercial liquidity provider incentive schemes in place. Both requirements should not be influenced by the introduction of asymmetric speedbumps from a regulatory perspective, as any tightening of the requirements would not take the base values into account (e.g. whether they have been strict or whether they have been lighter).

In addition, DBG wants to specifically object to the proposal to introduce tighter market making requirements for products with asymmetric speedbumps. Specifically, an asymmetric speedbump is not a tool that allows all liquidity providers to uniformly quote tighter at any cost (more, a tool to stimulate competition at the BBO) – there must be certain investments spent into the respective participant IT infrastructure in order to utilize the millisecond reaction advantage.

During the introduction of PLP at Eurex, members were asked about their individual reaction capabilities which were benchmarked with empirical findings of their past reaction time – the results indicated a significant gap among market participants in the same product. In essence, even in a product with an asymmetric speedbump there are multiple liquidity providers that are not able to utilize the millisecond reaction advantage and thus are not active at the BBO as their business offering is not to provide tight prices at the BBO but instead offer sizes at a magnitude others cannot offer. Tightening the market making requirements would again increase entry barriers for new participants that want to familiarize with market making and build up appropriate IT capabilities.

<ESMA_QUESTION_ALGO_48>

Q49 : Do you agree on the conclusion that speedbumps might not be a well-suited arrangement for equity markets? If yes, do you think that such arrangements for equities should be prohibited in Level 1? Please explain.

<ESMA_QUESTION_ALGO_49>

Currently DBG does not have in place asymmetric speedbumps on its Cash Markets platforms. Although we do not intend to introduce them in the near future, we do not agree that such arrangements shall be prohibited especially in Level 1 if there is no formal demonstration of the detrimental effect of speedbumps on financial markets in general and on equity markets in particular. First, ESMA provides examples of speedbumps implemented on equity markets in Canada and in the US. Banning speedbumps at this stage in Europe would hamper any future innovation involving speed bumps (whether symmetric or asymmetric) combined with specific market models/market features. Second, we consider the exercise of discretion as fully in line with the legal mandates and responsibility of exchange operators to ensure the orderly functioning of trading and to create and maintain an environment which maximizes the liquidity and attractiveness of the order book to the benefit of end clients.

We call for policy makers and authorities to take those aspects into account when considering if regulatory intervention of different kinds and depth into markets' functioning is required. We consider that the existing regulatory framework strikes a good balance between allowing for innovation and the continuous development of heterogeneous markets and the imperatives of investor protection, stability, and efficiency of markets.

<ESMA_QUESTION_ALGO_49>

Q50 : Do you think that the introduction and functioning of speedbumps should be further regulated? If yes, which specific requirements would you like to be included in EU legislation?

<ESMA_QUESTION_ALGO_50>

DBG believes that further regulation in this field is not required and rather encourages a continuous dialogue between the introducing exchange and the relevant NCA. We would not deem it reasonable to have a centrally, uniformly, applicable regulation for widely ranging ecosystems, as has been done with the Eurex PLP.

Asymmetric speedbumps like PLP, introduced by Eurex, are contributing to fair and orderly trading conditions. PLP provides a non-discriminatory market access to all participants through the use of functionality and aims to improve liquidity and the price discovery process of the order book. All participants who have placed a resting order in the order book are granted additional time to react to price changes in related/underlying markets. It is our understanding that showing firm and transparent trading interest in the order book should not be restricted to market participants that employ low latency connectivity but should be open for every trading participant. This improves the available liquidity and, as a result, increases attractiveness and importance of the order book for all market participants.

PLP does not differentiate on a participant level but on order level which ensures that all trading participants are subject to the same rules. It applies to all aggressive orders irrespective of the entering participant being a professional liquidity provider, a prop firm or agent trader. All aggressive orders are getting delayed, all passive orders are not. Therefore, the rules for PLP apply to all trading participants equally, no matter the individual participant's business model or trading setup, everyone can send a passive order and participate, no one is excluded due to technical or individual setup reasons. Same holds true for aggressive trading.

Consequently, DBG is convinced that the PLP is not only compatible with MiFID II but is promoting fair and orderly trading. As an exchange, Eurex can only ensure that the functionalities of the trading venue are available to all market participants on a non-discriminatory basis. How market participants make use of a specific trading functionality depends on their respective business model.

<ESMA_QUESTION_ALGO_50>

Q51 : Is there any specific issue you would like to highlight about speedbumps?

<ESMA_QUESTION_ALGO_51>

DBG fully appreciates the dialogue with our NCA on the topic of speedbumps. In addition, we are keen to provide not only our market participants but various other stakeholders with further empirical insights based on the recent findings of the Eurex PLP. DBG also would like to emphasize the continuous support of the entire trading community during the introduction of PLP; currently Eurex experiences a broad support of institutional traders, liquidity providers as well as HFT for its PLP mechanism.

In addition, DBG would like to directly comment on some points raised in the speedbump consultation text, that are not part of the questions:

Eurex provided clear evidence to trading participants and regulators that the introduction of PLP does not lead to non-tradable liquidity against the concerns raised by ESMA in point 324 of the consultation paper. We would like to highlight, that the empirical findings in all product classes where PLP is activated showed that trading against passive liquidity is not impeded, neither for clients, prop firms nor for liquidity providers. There is no indication that passive liquidity providers modify or delete orders within the deferral time such that the offered liquidity cannot be executed. In addition, despite the questions raised in point 341 of the consultation paper, Eurex has not received feedback from participants highlighting such a behaviour. The PLP implementation does not allow the passive liquidity provider to anticipate the incoming order, also, he is not aware whether it is an order from an agent or not. Thus, PLP is not providing an incentive to withdraw passive liquidity. Eurex monitors the volume that could not be executed because of PLP (so called protected volume), the total amount of protected volume accumulates to 2% to 4% of the executed order book volume. The majority of protected volume (more than 90%) occurs between liquidity providers that try to hit outdated quotes from other liquidity providers. Hence, market participants are still able to execute against passive liquidity, also liquidity providers themselves are still actively executing against resting liquidity.

Eurex would also like to address the concerns raised in point 345 of the consultation paper. By offering liquidity in the order book, all participants contribute to the aggregation of supply and demand of a product which in return determines its fair market price, trading interest not offered in the order book cannot contribute to this price formation. Hence, it is vital that every trading participant has fair access to the order book and can show the liquidity he is willing to trade without the risk of being adversely selected on the transparent offering they provide. If participants cannot adequately protect themselves against adverse selection, they end-up widening their spreads, showing less liquidity or simply exiting the market. Especially in the options markets, latency arbitrageurs can utilise multiple ways to exploit price differences between instruments and correlated product types. With an additional latency advantage, the risk to fail in such strategies is rather low. Eurex observed that in the last years, the amount of adverse selection due to latency arbitrage has significantly increased in various options products, resulting in a situation where those market participants offering liquidity in the order book and cannot protect against such behaviour have taken defensive measure. As a

consequence, the liquidity picture in options products has deteriorated, the number of market participants that are willing to offer liquidity has been reduced. Such continuous developments make order book liquidity fragile; alongside the regulatory framework, it is to the exchanges to provide incentives for liquidity providers to show their best offers transparently to all market participants in the central limit order book and not only in over-the-counter markets or via hidden execution channels. Making the order book a fair place, where participant with different risk appetite, latency characteristics and price models can compete for the best price and not trade amongst themselves is the major target of Eurex' PLP.

<ESMA_QUESTION_ALGO_51>

Q52 : What are your views on the relative timing of private fill confirmations and public trade messages? If you are a trading venue, please provide in your answer an explanation of the model you have in place.

<ESMA_QUESTION_ALGO_52>

DBG believes in fair connectivity and access possibilities, which are transparent and available for its market and participants. This applies naturally when it comes to market and trade data/information. The synchronisation of our different feeds and in particular private fill confirmations and public trade messages has been carefully considered and implemented. For our cash and derivatives T7 trading system, DBG applies a public first principle when comparing the public data sent via the Order by Order feed with the execution confirmation sent to the individual participants.

We have done so deliberately to ensure among other reasons that no market participant is able to benefit from private information gained from advanced information on their own flow. As a result, the system is designed in such a way that the market data is made available to all market participants at the same time according to the connectivity option chosen. Any trade will be reported via market data first, and the involved parties receive their trade confirmation slightly after via their private channels (market data first principle). (Note that beyond this there are many different physical interactions involved which could slightly change the data availability to customers. For instance, the geographical distance plays a significant role, too. However, this is out of control of DBG.) The involved parties can also identify their trades in market data, such that all participants (both the involved parties in the trade and all other market participants) can react on the new information and there is no advantage for single participants.

We understand there is a discussion in the market on certain practices. While a fills first methodology might incentivize trading participants to place lot orders tactically in related/correlated products that might have impact on the product they are really interested to gain earlier information, this is not required in our markets. It is not necessary to place orders in the leading product to react to any changes in the product (as it is reported via market data, even if one does not have orders placed in the leading product), one can still react and quote the correlated product.

Please also refer to our answer to Q54 where we highlight that as long as the information on the sequencing of the public and private feeds is transparent and accepted by all participants, the sequence shall be at the discretion of trading venues.

<ESMA_QUESTION_ALGO_52>

Q53 : Do you consider information on the sequencing of these two feeds at trading venues to be easily available? If you are a trading venue, please provide a link to where this information can be found publicly.

<ESMA_QUESTION_ALGO_53>

Yes, DBG makes the information on the sequencing of the feeds available. This specific point is analysed in detail in a presentation available on our website where the latency is analysed for both private and public feeds and compared for Eurex and Xetra, at https://www.eurex.com/resource/blob/48918/74e70365580415639ea4628ec25a6b72/data/presentation_insights-into-trading-system-dynamics_en.pdf.

<ESMA_QUESTION_ALGO_53>

Q54 : Do you think there should be any legislative amendments or policy measures in respect of these feed dynamics?

<ESMA_QUESTION_ALGO_54>

DBG strongly recommends no legislative amendment or policy measures, as the decision on feed dynamics for an exchange does heavily depend on the server and system environment and configuration of the exchange - i.e. the relative proximity of the matching engine and the market data distribution. Thus, any regulation could potentially trigger extensive and irreversible system changes on exchange and participant side. We believe that as long as this sequence is transparent to market participants, accepted and is in line with our principles of fair connectivity and access possibilities, decisions on feed dynamics should be seen as market microstructure tools where exchanges have discretion on the design of their infrastructures in line with the regulatory provisions on how to structure such dynamics.

Hence we would consider that as long as the information on the sequencing of the public and private feeds is publicly available, no additional legislative amendments or policy measures are necessary.

<ESMA_QUESTION_ALGO_54>