APT Reaction to the ESMA Consultation Paper
MiFID II/MiFIR review report on the development in prices for pre- and post-trade data and on the consolidated tape for equity instruments

5 September 2019

Introduction

The Association of Proprietary Traders represents 23 independent proprietary trading firms based in the Netherlands. Please find a list of our members below.

Since the opening of the first European options exchange in 1978, Amsterdam, together with Chicago and London, has become one of the most important global centers for proprietary trading, with a big concentration of bigger and small sized independent trading firms.

Most of our members operate as market makers on exchanges in and outside the EU and buy and sell financial instruments on own account, including shares, options, futures and ETFs. On the basis of an obligation following from MiFID II market makers commit to continuously providing liquidity to the market under all circumstances. Proprietary firms thus perform a "warehousing" function, where supply and demand for financial instruments do not always meet. Over the past 30+ years and to the benefit of institutional investors and private individuals, activities of proprietary trading firms have contributed to transparent and liquid capital markets and to tightening spreads between bid and offer price.

We are happy to answer any questions which may rise from this response and provide additional (qualitative and/or quantitative) information.

List of APT members	
1. Algorithmic Trading Group	13. Market Wizards
2. All Options	14. Nino Options
3. Criterion Arbitrage & Trading	15. Nyenburgh
4. Cross Options	16. Optiver
5. Da Vinci Derivatives	17. ORA Traders
6. DRW	18. Peregrine Traders
7. Flow Traders	19. Tower Research
8. Gelber Group	20. Quantlab
9. IMC	21. Utr8 Group
10. Jane Street	22. WEBB Traders
11. Jump Trading	23. 323 Trading
12. Mako	

Q1: Have prices of market data increased or decreased since the application of MiFID II/MiFIR? Please provide quantitative evidence to support your answer and specify whether you are referring to equity and/or non-equity instruments.

APT members have observed material price increases for market data in recent years, both before, during and since the application of MiFID 2.

To support this observation, we have made a model use case for a small proprietary trading firm:

- In this model, we have added metadata categories in order to normalise the types of fees charged across exchanges. The selection of the data profile is intended to be identical across the selected time frame in order to control for differences in product categorization by the exchanges over the years.
- This model firm is based in Europe, which trades in both equity and non-equity instruments, has five traders, two trading researchers and a further three people providing non-trading support (including risk/compliance) who also need access to market data.
- We have looked into fees charged to this type of firm by four major exchange groups across the EU: the London Stock Exchange Group (LSE), Borsa Italiana (BIT), Euronext and Deutsche Börse. This choice of exchanges is coincidental and does not intend to be selective to these 4 exchanges. The choice should be considered as a sample.

Over the period 2016-19 we see a total increase of fees for our model firm of 43.0% in total costs, 10.6% in display fees and 47.8% in non-display. Looking at each exchange in turn we see an increase of

- 50.4% in total costs, 9.2% in display fees and 68.1% in non-display at LSE;
- 74.5% in total costs, 6.0% in display fees and 89.0% in non-display at Euronext;
- 12.2% in total costs, 11.8% in display fees and 12.2% in non-display at BIT; and
- 75.0% in total costs, 16.4% in display fees and 87.2% in non-display at Deutsche Börse.

These are the percentage increases of the aggregate market data costs of exchanges between 2016 and 2019 for the selected data profile.

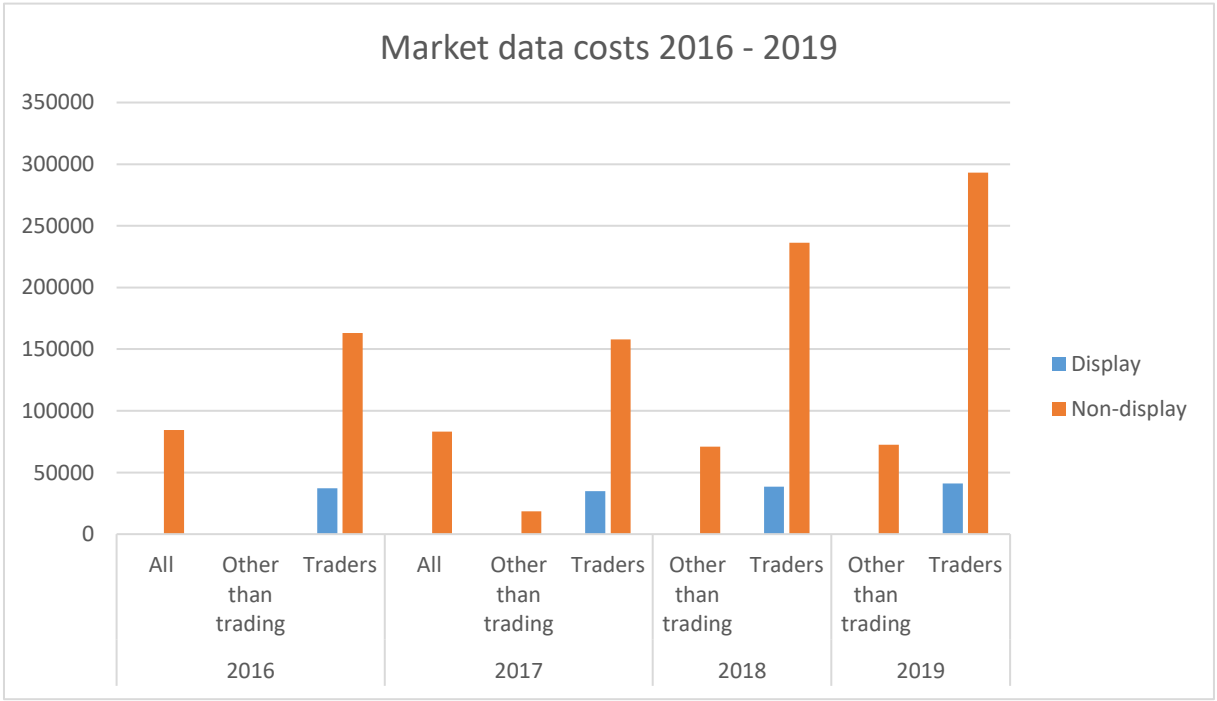


Figure 1: Aggregate market data costs for 4 exchanges; annualized

APT notes that some EU venues (also included in the sample set) charge exchange members, such as most APT member firms, less for market data when compared to non-exchange members. However non-display use fees across EU trading venues tend to be based on a fixed fee and therefore do not take into

account the size or scale of the customer firm. This has a particularly large impact on relatively small trading firms and can result in it being uneconomic for smaller trading investment firms to expand their business into new trading venues and markets.

Q2: If you are of the view that prices have increased, what are the underlying reasons for this development?

- APT members believe that, as publicly listed companies, trading venues will tend to prioritise more stable and predictable revenue streams such as those provided by market data subscriptions and will look to maximise the growth of these areas. We further note that trading venues continue to look for opportunities to broaden their market data revenue opportunities through new or novel charges for pre-existing use or changes in customers' behaviour. This trend has existed for some time going back as far as the first introduction of explicit charges for non-display use approximately 20 years ago. More recently APT members observe a trend around the additional charges for risk, quantitative analysis, and other non-trading use cases.
- Without improvements in transparency, it is difficult to adequately assess whether trading venues are complying with their obligations under MiFID II that market data be made available on a "reasonable commercial basis", i.e. based on costs of producing and disseminating those data + a *reasonable* margin (see par. 38 of the Consultation Paper).
- In this context we also note the following:
    - Because of the rising costs of market data, the barriers to entry for new market participants are becoming higher.
    - Our members do not have any other option than to accept the fees, given the lack of viable alternative sources to obtain this critical input that guides both trading and risk management practices *('there is no alternative'*).
    - As market makers continuously operate and "make" prices on exchanges, they are not only "takers", but also "makers" of data and should be considered as co-producers of the data (cf. owners of solar panels who provide energy to the grid, leading to a rebate on their energy bill).

Q3: Following the application of MiFID II/MiFIR, are there any market data services for which new fees have been introduced (i.e. either data services that were free of charge until the application of MiFID II or any new types of market data services)?

- Yes, as noted above APT members have observed an increase in the number of venues charging for non-trading uses of market data, including charges for critical uses such as risk and compliance. In some cases, these new charges coincided with the application of MiFID II or in other cases were brought in during the period leading up to the application of the MiFID II rules.
- Some venues now charge on the basis of the "*ability to access*" the data as opposed to actual documented use. As such, without significant care in the design of internal systems and processes that make use of market data, firms can find themselves unexpectedly hit with significant market data charges. With this approach trading venues and their auditors can label anyone within a firm as a data consumer. As an example, one APT member, following an audit, had to pay market data fees for all non-traders, including people from the HR department despite no use of market data being made by these individuals.
- We have also observed examples of certain venues introducing a general subscription fee on top of other user fees.

Q4: Do you observe other practices that may directly or indirectly impact the price for market data (e.g. complex market data policies, use of non-disclosure agreements)? Please explain and provide evidence.
The increased complexity of market data policies and associated documents has become a significant concern for APT members. These now routinely run to over 75 pages and are often subject to multiple revisions within a calendar year. This complexity, combined with the frequency of revisions creates a significant burden, particularly for smaller investment firms and further acts as a barrier to entry when these firms are looking to expand their businesses.

APT members unanimously note that there is a varying approach in the interpretation of market data policies between different contact channels to the exchange, in particular differences arise between the market data teams of the exchange and the audit teams. This claim comes from the general experience of contact with the exchanges, and is not limited to the exchanges that were part of the response in Q1. APT members note that the lack of clarity often causes misinterpretation of rules, and that this is often arising from the way that exchange rules are presented to them. APT members agree that transparency in the interpretation of market data policies is essential.

Q5: Do you agree that trading venues/APAs/SIs comply with the requirement of making available the information with respect to the RCB provisions? If not, please explain which information is missing in your view and for what type of entity.
No, we do not agree that TVs comply with the requirement of making available the information with respect to the Reasonable Commercial Basis provisions. As indicated in the Consultation Paper, a significant number of trading venues and APAs are not publishing the required information, and others are not providing key data, such as revenues from market data and specific information detailing how the price for market data was established. RCB transparency has proven an “empty shell” up until now. We also note that the disclosure requirements do not apply to trading venues and APAs that make market data available to the public free of charge. MiFID II requires that certain pre-trade and post-trade data be provided to the public free of charge. Compliance with that requirement should not exempt trading venues and APAs from providing the necessary disclosure to market participants regarding market data that is available for a fee.

Q6: Do you share ESMA’s assessment on the quality of the RCB information disclosed by trading venues, APAs and SIs? If there are areas in which you disagree with ESMA’s assessment, please explain.
We agree with ESMA that the lack of meaningful disclosure, i.e. quantitative information, makes the RCB information provided by trading venues and APAs essentially useless for determining whether the market data fees are cost based and reasonable.

There is lack of depth and detail within trading venues and APAs RCB disclosures in particular when compared with the length, complexity and detail of the underlying market data policies, agreements and price schedules.

Standardising the content for RCB disclosure will help to ensure that these are able to be used for assessment and comparison between similar entities. Standardised and meaningful content is more

important than standardised format but further clarification with regard to ESMAs expectations in this area would be appreciated.

Q7: Do you agree that the usability and comparability of the RCB information disclosed could be improved by issuing supervisory guidance? If yes, please specify in which areas you would consider further guidance most useful, including possible solutions to improve the usability and comparability of the information.
We agree. In the current situation, participants basically need market data policy specialists to figure out if their market data usage is in line with the various venues' market data policies. Since the policies differ so much and are also amended so often, it is only when the firm is audited by the venue that the participant can have confirmation it complies with the venue's policy.

Increased transparency into how the price of market data is set and standardisation of terminology are needed. We encourage ESMA to issue supervisory guidance and to clarify the standardised, quantifiable metrics that trading venues should provide and suggest that ESMA consider whether a prescribed standardised template for the data would aid the usefulness and comparability of this data. If this approach is adopted, we would encourage ESMA to seek input from both trading venues and APAs as well as end users of market data to ensure any such template is practical and does not create an unnecessary administrative burden that would offset the benefit.

Q8: Do you think that the current RCB approach (transparency plus) can deliver on the objective to reduce the price of market data or should it be replaced by an alternative approach such as a revenue cap or LRIC+ model? Please justify your position and provide examples of possible alternatives.
We believe that transparency on market data costs is lacking. We agree that it is too early to consider alternative approaches, and that the current RCB approach, in conjunction with further supervisory guidance and more visible enforcement activity, needs to be given further time.

Q9 : Do you consider that a revenue cap model as presented above might be a feasible approach to reduce the cost of market data? Which elements would be key for successfully implementing such a model?
As a first step, there should be significant improvement in cost transparency. Once there is clarity on cost, then further, appropriate steps could be considered.

Q10: Did data disaggregation result in lower costs for market data for data users? If not, please explain why?
No. Disaggregation of data seems to give venues additional arguments to introduce new fees, charging separately for each component. Disaggregation on asset classes, country of issue, trading currency, auction vs continuous trading, delivers no benefits for most of our members as they will trade on a bigger spectrum.

APT members would therefore much more welcome aggregated products covering more than one asset class or multiple trading venues within an exchange group. These are often the most cost effective way for larger users to access market data on certain venues. We have observed one instance of an aggregate product being removed from a primary markets pricing schedule in 2019, forcing users to instead

subscribe to two disaggregated products at a higher overall cost. We would encourage support for these bundled packages while at the same time ensuring that smaller users with more tailored market data needs are well catered for via appropriately priced disaggregated products.

Q11: Why has there been only little demand in disaggregated data?
Because many participants will mostly need data from several disaggregated data groups. Participants realize that asking for only a part of the data will not lower their costs.

Q12: Do trading venues and APAs comply with the requirement to make available data free of charge 15 minutes after publication? If not, please explain in which areas you have identified deficiencies
No, many do not. In particular certain trading venues and APAs

- still do not provide any data free of charge. (F.e., see BIT Level 1 and Level 2 delayed data licenses (15 minutes delay): www.londonstockexchange.com/products-and-services/market-data/realtimedata/pricesandpolicies/schedule-b-2019.pdf.)
- are not publishing data free of charge in a format that can be easily read, used and copied and that is machine-readable
- continue to provide "premium" access to market data for a fee where data is published in a different and more user-friendly format

Q13: Do you consider it necessary to provide further supervisory guidance in this area (for instance by reviewing Q&As 9 and/or 10) Please justify your position and explain in which area further guidance may be needed? Please differentiate between pre- and post-trade data.
It could be helpful when ESMA provides for requirements with regard to post trade data:

- consistent formatting, i.a. formats that can actually be machine-read;
- delivery mechanism, both for streaming and downloading/FTP end-of-day, for a reasonable period of time.

Q14: Do you agree that the identified reasons, in particular the regulatory framework and competition by non-regulated entities, make it unattractive to operate an equity CT?
Yes and to solve this, it could be required that trading venues and APAs must mandatorily contribute post-trade data at no charge. As a corollary, we explicitly support the proposal by ESMA with regard to the redistribution of revenues to contributing entities. The CTP then has a lower expense base to recover by means of fees charged to users, which makes the business case for a CTP much more viable and increases the chances of achieving the goal that the consolidated tape can serve as a transparency tool at an affordable price for ordinary investors. Further regulation of activities akin to the provision of a CT is less preferable than ensuring a regulatory environment which enables a CTP to operate on a viable economic basis.

Q15: Do you consider that further elements hinder the establishment of an equity CT? If yes, please explain which elements are missing and why they matter.
We believe a significant that has hindered the establishment of an equity CT is the complexity of exchange market data contracts. Policies and agreements that originally were short and succinct documents are now often packages of multiple documents that are so complex, even exchange personnel struggle to explain them to users. In establishing a CTP, we believe a more efficient model would be to harmonise a

standard contract form and require input contributors to contract with a central CTP administrator, rather than requiring multiple, bilateral contracts with individual venues/APAs.

An additional barrier to the establishment of a CT is the diversity of proprietary data formats trading venues and APAs employ for publication of market data. It would be a simple technical solution for the CTP to designate a standard information exchange protocol that trading venues and APAs should use to send post-trade data in a manner similar to the Securities Information Processor (SIP) in the US. While this requires some development costs for the contributing parties, these could be offset through revenue flow-back from the CT to the contributing parties.

Q16: Please explain what CTP would best meet the needs of users and the market?
We believe a CT should be a real-time, post-trade tape that democratizes the latency of market data and allows small investors to have low-cost access to comparable info as large investors. This should ensure that consistent and accurate data is made available to market participants, and allowing investors to obtain a full picture of the trading volumes of a product listed across multiple exchanges.

The CT should not be mandatory to consume (like in the US), nor should we introduce a protected quote rule in the EU. At the moment, European market conditions have not fostered the emergence of a CT. We believe these conditions should be created, but then it should be up to market participants to "decide" on-demand for the CT. Mandatory consumption would be unreasonable for smaller players, considering their limited and/or more local market coverage, as ESMA rightly states in the Consultation paper.

Q17: Do you agree that real-time post-trade data is available from both trading venues and APAs as well as data vendors and that the data is currently not covering 100% of the market, i.e. including all equity trading venues in the EU and all APAs reporting transactions in equity instruments? If not, please explain.
We agree that post-trade data is available from trading venues and APAs. While trades are reported, however, they are reported to different places, in different formats, making it difficult to assess the true liquidity. In particular APA data quality is far from consistent, and delivery mechanisms are disparate and not easily machine-readable. The aggregate cost of all of these fragmented offerings is also high.

Q18: Do you agree that post-trade data is provided on a timely basis and meets the requirements set out in MiFID II/MiFIR and in the level 2 provisions? If not, please explain.
As stated above, we believe the current challenge lies with the inconsistency of data quality and disparate delivery mechanisms (such as flashing information on websites) that make it nearly impossible for market participants actually to evaluate all of the published information.

Q19: Do you agree with the issues on the content of data and the use different data standards identified or do you consider that important issues are missing and/or not correctly presented?
We agree with ESMA that a first and indispensable step is to ensure a high degree of data quality and the use of the same, or at least easily comparable data standards, across trading venues and APAs.

Q20: Do you agree that the observed deficiencies make it challenging to consolidate data in a real-time data feed? If yes, how could those deficiencies best be tackled in your view?

Currently, given that not all trading venues use a common standard, brokers have no standard to use which makes it more difficult to compare data. This is reflected in the lack of consistency between broker reports. A harmonised standard, such as MMT, that would be enforced would be helpful. The long term benefit would be worth the one-off cost for change (in particular IT cost). Moreover, it would improve data exchange in the future and thus reduce recurring costs.

Q21: What are the risks of not having a CTP and the benefits of having one?
We agree with ESMA that a CTP would provide consolidated post-trade data in a timely manner; invest in improving data quality; and make it viable to use post-trade data to view the liquidity landscape for the same (type of) instrument traded across fragmented venues.

While we agree with ESMA that some of the cost of not having a CTP could be reduced simply by requiring trading venues and APAs to provide post-trade data in a more standardized format, this would not provide the benefits of a CTP. A real-time post-trade CTP would provide a neutral and reliable source of the current market price, giving investors' confidence to trade and supporting best execution. It would also strengthen EU financial markets, supporting a more integrated CMU.

The risk of not having a CTP is that a reliable view on liquidity in post-MiFID II fragmented markets will remain inaccessible for the majority of market participants. This is why the inclusion of pure OTC and SI data is a key element of a successful post-trade tape. Moreover, we believe it is essential that the CTP be as close as real time as possible and avoid too much freedom with regard to deferrals (national discretion with regard to the deferrals should be removed).

However, the design of the CT should also consider intellectual property rights and not report data in such a way that trading strategies may be able to be reverse-engineered (e.g. data enabling third parties to reconstruct which participants have traded).

Q22: Would you be supportive of an industry-led initiative to further improve data quality and the use of harmonised standards or would you prefer ESMA guidance? Please explain.
We would support adopting the industry-led initiative on data quality (MMT); however, we believe there is still a need for guidance from ESMA on appropriate flagging.

Q23: In addition to the standardisation of the reporting and format, as described before, did you identify any further relevant data quality issue to be considered for the successful establishment of CTPs?
We believe it is important, for the CT to achieve a complete picture of Europe's fragmented liquidity, that the CT include *all mandatory* trade-related information. Nothing should be left out – rather, we should allow market participants to filter what information they find useful.

From a policy perspective, we also believe a comprehensive overview of addressable vs. non-addressable liquidity may be illuminating to policymakers, regulators and market participants. A complete CT, by highlighting the amount of liquidity in the EU that is addressable to some but not to all market participants, will help us collectively evaluate whether the rules underpinning European market structure are succeeding in creating the market quality we seek.

Q24: Do you agree that the mandatory contribution from trading venues and APAs to a CTP would favour the establishment of CT?
Yes, we strongly agree, provided that the terms and conditions of such contribution are reasonable. As a corollary, we explicitly support the proposal by ESMA with regard to the redistribution of revenues to contributing entities.

Q25: Do you have preferences between the option of (i) requiring trading venues and APAs to contribute data to the CT, or, in alternative (ii) setting forth criteria to determine the price that CTPs should pay to TVs and APAs for the data? If so, please explain why.
We believe a mandatory contribution of data to the CTP is the simplest and cleanest structure to make a CT viable. Regarding setting forth criteria to determine the price that CTPs should pay to TVs and APAs for data, we believe this route is at risk of entanglement in the same issues that have complicated the determination of what RCB should be with respect to the cost of market data from trading venues.

Q26: Do you agree that the mandatory consumption could favour the establishment of a CT? If not, please explain your concerns associated with the mandatory consumption.
We believe mandatory consumption would be misguided. We understand that some participants believe mandatory use of the CT would provide economic incentives to provide a CT, but we believe those incentives already exist under a model wherein venues and APAs mandatorily contribute input data. The use of the consolidated tape by market participants should be optional. We believe, rather, we should make the European CT a product of genuine utility and value for large and small investors, such that the demand for it arises naturally.

Q27: Would mandatory consumption impact other rules in MiFID II and if yes, how?
Please see our answer to Q26 above.

Q28: Do you consider it necessary that the CT covers all trading venues and APAs and the whole scope of equity instruments or would you be supportive of limiting the coverage of the CT? Please provide reasons for your preference and explain your preferred approach.
We believe 100% coverage is vital, as otherwise the added value of the tape would be limited and information would still be fragmented, as currently is the case. Moreover, with respect to equity-like instruments, it is already a legal requirement. The tape would also be especially relevant as a reference for non-liquid instruments.

Q29: Do you agree with ESMA's preferred model of real-time CT? If you consider that, on the contrary, the delayed or tape of record CT are preferable, please indicate the reasons of your preference.
Yes we agree with ESMA's preferred model of real-time CT. We believe real-time data is crucial if the CT aims to provide a neutral and reliable source of the current market price, giving investors' confidence to trade and supporting best execution. Providing a real-time view of trading activity also consolidates EU financial markets, supporting a more integrated CMU.

Beyond this, we also simply believe there is no reason why the CT cannot be real-time given the technological sophistication of the market as a whole and the low burden, from a technology perspective,

of republishing trade events. To the extent any systems would need to be adapted to accommodate real-time reporting, we believe the cost of that investment is more than worthwhile to promote a cohesive view of liquidity across European markets accessible to all investors.

Q30: Are there any measures (either technical or regulatory) that can be taken in order to mitigate the latency impacts?
To make the CT robust and usable as a real-time tape, all the possible deferrals and delayed reporting periods of MiFID II should be revisited. We believe deferral periods for liquid blue chips should be reduced, and for other instruments, deferral periods must be more strictly enforced (i.e. late reporting should not be tolerated and certainly should not be used as a means to achieve deferral).

Q31: Do you agree that the CT should be operated on an exclusive basis? To what extent should other entities (e.g. APA or data vendors) be allowed to compete with the CTP?
We believe in competition to promote innovation and prevent monopolistic structures from codifying. However, we believe the primary benefit of a CT is to overcome the fragmentation of European markets and therefore support a single, reliable source for a consolidated overview. We also acknowledge that requiring trading venues and APAs to contribute input data on a mandatory basis would be an operational burden if data had to be directed to more than one CTP. Limiting the operation of the CT to a single provider minimizes this potential burden and increases the economic viability of the CTP business model, in addition to preserving a single, "golden source."
We do, however, envision that different asset classes may be able to be operated by different CTPs.

Q32: Should the contract duration of an appointed CTP be limited? If yes, to how many years?
As noted above, we believe it a single provider should operate the CT to have one reliable source, to minimize the operational burden on contributors, and to concentrate subscribers and make the business model more attractive. We agree with ESMA that the presence of numerous CTPs would by definition diminish the number of users per CTP and result in a commercially less attractive opportunity for providers. Therefore, we believe ESMA should tender based on a fixed contract period, which should be at least 3-5 years (provided all requirements continue to be met). Regardless of contract duration, the top-level governance of any CTP remains critical. This should be required to include a diverse set of market stakeholders and avoid giving exchanges or tape producer exclusive rights. This is the most important safeguard against the risks of monopoly or conflicts of interest.

Q33: Please indicate what would be, in your view and on the basis of your experience with TVs and data vendors, a fair monthly or annual fee to be charged by a CTP for the real-time consolidation per user?
We agree with ESMA's proposal that CTPs should be allowed to recover the costs for consolidation and distribution the data plus an appropriate margin to be further specified by ESMA.

Q34: Would you agree with the abovementioned model for the CT to charge for the provision of consolidated date and redistribute part of the revenues to contributing entities? If not please explain.
We agree with ESMA's proposed model for redistribution of revenues to contributing entities. We believe revenues should be allocated back to exchanges/APAs based on contribution to executed liquidity, weighted by value (e.g. price-forming trades weighted more heavily than trades executed under a waiver or in an auction (lesser value to price formation)). Coupled with this should be seriously deterrent

penalties on trading venues/APAs for incorrect or late data (with APAs, in turn, policing SIs and OTC reporters for their post-trade reporting).

In any case we would caution against copying the US system of remunerating exchanges for contributing data to the tape, as that has created dysfunctional incentives for venues to register as exchanges in order to be eligible for tape revenues and even to game revenue allocation through specific order types or market data revenue sharing programs, without genuinely contributing executions.

Q35: How would Brexit impact the establishment of a CT? Would an EU27 CTP consolidating only EU27 transactions be of added value or would a CT that lacks UK data not be perceived as attractive?
As stated above, we believe a primary benefit of a consolidated tape is to overcome fragmentation. An EU27 CT would still be very valuable in this respect, but we would definitely prefer to see one consolidated source reflecting data from the EU27, UK and Switzerland.

Q36: In your view, how would an EU27 CT impact the level playing field between the EU27 and the
We believe an EU27 CT (though preferably including the UK and Swiss data) will create a more integrated European market, allow investors to obtain a full picture of the trading volumes of a product listed across multiple exchanges, and help more securities and ETFs in Europe to be traded on exchanges.