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| Response Form to the 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 |

**Responding to this paper**

ESMA invites comments on all matters in this paper and in particular on the specific questions summarised in Annex 1. 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 **06 September 2019.**

All contributions should be submitted online at [www.esma.europa.eu](http://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\_MDA\_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\_MDA\_nameofrespondent\_RESPONSEFORM. For example, for a respondent named ABCD, the response form would be entitled ESMA\_MDA\_ABCD\_RESPONSEFORM.
5. Upload the form containing your responses, in Word format, to ESMA’s website ([www.esma.europa.eu](http://www.esma.europa.eu) under the heading “Your input – Open consultations” 🡪 “Consultation on Position limits and position management in commodities derivatives”).

**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](http://www.esma.europa.eu) under the heading [Legal Notice](http://www.esma.europa.eu/legal-notice).

**Who should read this paper**

All interested stakeholders are invited to respond to this consultation paper. This consultation paper is primarily of interest to users of market data and trading venues, but responses are also sought from any other market participant including trade associations and industry bodies, institutional and retail investors.

**General information about respondent**

|  |  |
| --- | --- |
| Name of the company / organisation | Virtu ITG Europe Limited; Virtu ITG Ventures Limited |
| Activity | Investment Services |
| Are you representing an association? |  |
| Country/Region | Ireland |

**Introduction**

***Please make your introductory comments below, if any***

<ESMA\_COMMENT\_MDA\_1>

Virtu ITG Europe Limited (“Virtu Europe”) is an agency-style broker that provides execution services to institutions, banks and brokers across the EMEA region. Virtu Europe is also the operator of POSIT MTF. Virtu provides broker-neutral trading analytics to institutions, banks and brokers across EMEA through Virtu ITG Ventures Limited (“Virtu Ventures”), including in Fixed Income and FX markets. This response will refer to Virtu Europe and Virtu Ventures collectively as “Virtu”.

Market data from trading venues and APAs is critical to the operation of each of Virtu’s European businesses. It would not be possible to operate POSIT MTF in compliance with its authorisation, or to deploy Virtu algorithms to execute client orders safely and effectively, or to provide clients with an accurate assessment of their execution quality, without market data. Crucially, it is the market data generated and sold by the primary exchanges in particular that is essential for an accurate picture of the market as a whole and for which there is no substitute.

Year-on-year the price that Virtu pays for market data has increased. Each increase adds to the cost of achieving and monitoring best execution for investors. In the case of POSIT MTF, the high cost of market data directly motivated the decision to de-list certain less liquid equities from the venue, reducing competition for the exchanges and choice for investors.

It is largely inconceivable that such dramatic and fast-paced price increases reflect a corresponding increase in the cost of supply. New fees imposed since MiFID II on the use of market data in a trading venue provide a clear illustration of this. Prior to MiFID II, exchanges, including the London Stock Exchange, Euronext, Nasdaq OMX and Bolsa Madrid, charged a single fee for all non-display use of their market data. Come 2018 and each of those exchanges (and others) had imposed a new and separate charge for non-display use in a trading venue. For example, based on the LSE’s 2017 pricing schedule, Virtu Europe paid a total of £60,560 for all non-display data usage, expressly including use in a trading venue. Based on the 2019 pricing schedule, Virtu Europe anticipates paying a total of £82,375 (taking into account the new trading platform fee of £54,917) for the same data, via the same provider, the same connectivity, and received into the same single feed handler. The new fee is clearly arbitrary and opportunistic given the absence of any actual change to how the data is provided or consumed. The Bolsa Madrid pricing for use of their market data in a trading venue, which is based on a per-stock charging model, can be seen as even further divorced from any genuine assessment of the cost of provision.

Instead, it is our view that the exchanges are leveraging their monopoly to maximise revenues from the sale of market data in the context of diminishing revenues from more traditional sources (i.e. execution). We observe a tacit recognition of that monopoly position in the actions of the primary exchanges. For example, in their widespread refusal to negotiate or clarify the terms of their complex data distribution agreements, their misuse of audit provisions, and their willingness in certain cases in our experience to seek commercial leverage in their ability to cease supply of the market data on which we depend.

We agree with ESMA that accountability can be improved through enforcement of transparency around the RCB requirements and that efforts should certainly be made in that area. However, while the exchanges continue to monopolise the supply of the data generated by market participants transacting on their market, those same market participants will have no practical choice but to continue to subscribe for that data at the price mandated by the exchange. <ESMA\_COMMENT\_MDA\_1>

**Questions**

1. : 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.

<ESMA\_QUESTION\_MDA\_1>

In ESMA’s 2014 consultation paper on the topic of market data, ESMA referenced the Commission’s view of market data charges in the EU as ‘too high’. Since then and since the application of MiFID II, Virtu has seen a >100% increase in the already high cost of European market data.

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|  | **2016\*** | **2019\*\*** | **% increase** |
| **Display** | 546,553 | 670,441 | 23% |
| **Non-display** | 250,409 | 529,450 | 111% |

\* *Actual cost to Virtu in GBP for all European markets*

\*\**Projected cost to Virtu in GBP for all European markets*

We attribute this increase to two main factors:

(1) Exchanges increasing their prices year-on-year for pre-existing market data use cases; and

(2) Exchanges expanding the list of chargeable use-cases, giving rise to new fees. For example, a number of exchanges have introduced a new fee for use of their market data in a trading venue (see Q3) and for ‘other applications’ such as risk checks. Certain exchanges have also taken what used to be a single fee for all non-display usage and broken that out into separate fees for non-display usage in different applications, meaning that a market participant with a profile such as Virtu’s is forced to pay multiple times for the same data set. We are also observing a trend led by the LSE to erode the dividing line between market data (from the exchange) and derived data (created by the recipient), such that more and more derived data, which is particular important for clients analysing trading performance, becomes chargeable. <ESMA\_QUESTION\_MDA\_1>

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

<ESMA\_QUESTION\_MDA\_2>

We recognise that exchanges face commercial pressure to increase their revenues from the sale of market data in the context of a long-term downward trend in revenues from trading fees as a result of market fragmentation. At the same time, there is nothing to counterbalance this dynamic. There are no real competitive constraints on the freedom of the exchanges to raise prices due to the reliance of market participants on the market data over which they hold a monopoly of supply.

MiFID II saw the introduction of a myriad of new electronic trading platforms. This has led to greater fragmentation of liquidity and reinforced the importance of algorithmic trading, which relies on the primary exchanges as the most important source of data to form a complete picture of the market on which algorithms can base their trading decisions. In addition, each new trading platform is likely to depend on market data from the primary exchanges, whether for the purposes of price formation or risk controls.

We see these dynamics at work in Virtu’s own agency execution business, which requires all of level 1, level 2 and auction data from the primary exchanges in order to effectively and safely trade in the market. Similarly, in order for Virtu’s POSIT MTF to comply with its conditions of authorisation and the requirements of MiFID II, it must obtain prices from the relevant primary market in order to offer crossing of orders in instruments below large-in-scale thresholds. There is no substitutability as the only source of the data is the relevant exchange.

<ESMA\_QUESTION\_MDA\_2>

1. : 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)?

<ESMA\_QUESTION\_MDA\_3>

With the advent of MiFID II, a number of exchanges introduced new pricing specific to use of their market data in a trading venue. The increase in the number of venues, in particular the expansion in the number of systematic internalisers, can be seen as a market opportunity for the exchanges in this respect. For example, in their recently-published 2019 fee schedules:

* Bolsa Madrid has added a new fee of EUR 75,000 p.a. for use of their data by a systematic internaliser;
* LSE has added a new fee of GBP 54,917 p.a. for us of their data by a trading platform; and
* Borse Italiana has added a new fee of EUR 37,240 p.a. for us of their data by a trading platform.

Other trading venues that have introduced new pricing specific to use of their market data in a venue include:

* Euronext
* Xetra
* Irish Stock Exchange
* Nasdaq OMX
* Oslo Bors

The overall effect of the introduction of new pricing for existing uses is that customers have to pay more for using the same data. Whereas previously, payment for data allowed multiple uses, exchanges are increasingly charging for the same data for each separate use*.*<ESMA\_QUESTION\_MDA\_3>

1. : 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.

<ESMA\_QUESTION\_MDA\_4>

Exchanges’ market data policies are frequently written in unclear language, which may make it difficult for a customer to be sure whether its usage is chargeable, or not. Exchanges will not generally negotiate material changes to their documentation, which customers therefore have no choice but to accept in order to be able to receive the market data on which they rely. Market data policies, including fee schedules, are regularly updated (more than annually) on the exchange website, often without notice to customers. This makes it extremely difficult for customers to understand and keep track of their changing obligations and liabilities. It has been Virtu’s experience that this lack of certainty significantly increases the likelihood that an exchange will make a claim for unpaid fees against a customer in the context of an audit. Where that occurs, customers may be severely limited in their ability to resist such a claim due to the lack of clarity of terms and in the context of their dependency on that exchange for the continuing supply of their market data, for which there is no substitute.<ESMA\_QUESTION\_MDA\_4>

1. : 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.

<ESMA\_QUESTION\_MDA\_5>

We agree with ESMA that the content of the RCB information disclosed by trading venues and APAs is incomplete, in particular as it relates to the disclosure of revenues from market data and information on how the price for market data was set. Even where a trading venue or APA nominally complies with the obligation to provide this information, its practical benefit to consumers is largely nullified by the superficiality of the content.

<ESMA\_QUESTION\_MDA\_5>

1. : 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.

<ESMA\_QUESTION\_MDA\_6>

We agree with ESMA that the quality of the RCB information disclosed by trading venues and APAs is inadequate, in particular as it relates to the revenues from, and the price of, market data. The disclosers apply different and often opaque cost accounting methodologies that make it impossible to assess the reasonableness of the applied margin. In their current form, the RCB disclosures do not effectively enable data users or supervisors to effectively compare offerings or monitor compliance.

<ESMA\_QUESTION\_MDA\_6>

1. : 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.

<ESMA\_QUESTION\_MDA\_7>

Virtu generally agrees with ESMA’s proposals to improve the usability and comparability of the RCB information. We would support an initiative to mandate the use of standardised terminology. The use of a consistent reporting template would also help data users to interpret and compare exchange pricing. We agree that pricing information must include quantitative data that clearly shows how costs are allocated to the production and dissemination of market data on a standalone basis, such that the applied margin can reasonably be assessed and compared between exchanges. It is our view that ESMA should also consider standardising the cost allocation methodology itself. The use of different cost allocation methodologies, even where fully described, will make it practically impossible to compare across data providers. A number of exchanges do not maintain historical pricing on their websites. This puts the onus of tracking price changes over time on the consumer. We think that transparency would be further enhanced by requiring exchanges to maintain details of historical pricing on their website.

In addition, we also see benefit in further guidance in relation to the ‘per user’ charging model. It is our experience that exchanges require payment of a separate and additional fee for each user enabled for their data regardless of whether that user in fact makes use of the data in a given period. In addition, a separate and additional ‘per user’ fee will generally be levied in respect of each application through which a single user has the potential to access that market data. The exchanges will typically not permit netting across applications or data vendors unless the subscriber has completed a complex and lengthy application process.

For example, a single trader is likely to have multiple order management and execution management systems on their desktop, each of which will receive the same data from the same ultimate source (e.g. LSE L1 and L2 data) and fulfil a slightly different function. Typically, a separate user fee will be levied by each exchange on that single trader in respect each individual system, meaning that data recipients are paying multiple times to consume the same data.<ESMA\_QUESTION\_MDA\_7>

1. : 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.

<ESMA\_QUESTION\_MDA\_8>

We consider that there is benefit to be had in pursuing the proposals outlined by ESMA in this consultation to improve the utility of the RCB information and so the transparency around the true cost of market data before we look again at more intrusive measures. Nothwithstanding our support for these enhancements to the RCB regime, we recognise that, while the exchanges continue to monopolise the supply of the market data on which market participants depend, those market participants have no real choice other than to accept the pricing set by the exchanges.

<ESMA\_QUESTION\_MDA\_8>

1. : 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?

<ESMA\_QUESTION\_MDA\_9>

See Q8.

<ESMA\_QUESTION\_MDA\_9>

1. : Did data disaggregation result in lower costs for market data for data users? If not, please explain why?

<ESMA\_QUESTION\_MDA\_10>

We have not observed that data dissagregation resulted in lower costs for the reason that the majority of professional investors and intermediaries require a largely complete picture of the market in order to trade safely and efficiently. As such, market participants continue to require all of the component streams of the market data they received previously on an aggregated basis, but in many cases they will now pay a higher total price for that market data since they are required to subscribe stream-by-stream.

<ESMA\_QUESTION\_MDA\_10>

1. : Why has there been only little demand in disaggregated data?

<ESMA\_QUESTION\_MDA\_11>

See Q10.

<ESMA\_QUESTION\_MDA\_11>

1. : 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

<ESMA\_QUESTION\_MDA\_12>

We agree with ESMA that the market data required to be made available free of charge to data users 15 minutes after publication is very useful. This is particularly the case for the purpose of assessing execution quality across asset classes to the standard that is now required of investment firms under MiFID II.

However, we also agree with ESMA that such data is often not provided in a truly machine-readable format. In addition, some trading venues and APAs make the data available for only a very short period of time and subsequently delete it. As a result, it is either impossible or very onerous (requiring development) to consume. It is these failings that prevent underlying investors (represented by institutions) from truly benefitting from the data as an input into best execution analysis.

We would not consider the performance of trading analytics in compliance with regulatory obligations as an “added-value service”, whether or not it is outsourced to a service provider.

<ESMA\_QUESTION\_MDA\_12>

1. : 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.

<ESMA\_QUESTION\_MDA\_13>

We would encourage ESMA to consider clarifying the requirements around the publication of this data to ensure:

* Consistent formatting that is genuinely capable of being machine read;
* Consistent delivery mechanism, including streaming and a downloadable end-of-day file; and
* Persistant disclosure of the data for a reasonable period of time to allow consumption.

<ESMA\_QUESTION\_MDA\_13>

1. : 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?

<ESMA\_QUESTION\_MDA\_14>

We generally agree with ESMA’s assessment of the reasons why an equity CT has not yet emerged in the market. It is our view that the regulatory requirements imposed on a CTP are generally appropriate to its significance to the market. From the perspective of subscribers, a single CT would have advantages over competing offerings from non-regulated data vendors (see Q21). The issue of competition with non-regulated entities could also be addressed by mandating that any CTP should receive the input market data from trading venues and APAs free of charge. Although we see considerable value in an equity post-trade CT, we would not expect there to be any demand in practice if the cost of subscription reflected the cost to the CTP of the input market data at current price levels. At current price levels, the resulting CT would not be affordable. For that reason, we would argue that any viable CTP should receive the input market data from trading venues and APAs free of charge. <ESMA\_QUESTION\_MDA\_14>

1. : 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.

<ESMA\_QUESTION\_MDA\_15>

We think that ESMA has identified the primary factors hindering the establishment of an equity CT. We would caution against a model that required subscribers to contract directly with the underlying trading venues and APAs for use of the CT on the basis that exchange agreements are typically long and complex and could therefore introduce barriers to take-up by subscribers.<ESMA\_QUESTION\_MDA\_15>

1. : Please explain what CTP would best meet the needs of users and the market?

<ESMA\_QUESTION\_MDA\_16>

We think the market would benefit considerably from a post-trade CT that provides a single, consolidated view of trading for the purposes of trade reconciliation, transaction cost analysis and best-execution evaluation.

We would welcome the subsequent expansion of an equities post-trade CT into other asset classes, but we think that the right approach is to begin with an equities CT that can be refined through use and form the basis for work on a multi-asset offering.

We agree with ESMA’s focus on a post-trade CT. It is our view that investors and intermediaries that are sensitive to latency will continue to require low-latency pre-trade market data for which a CT would not be suitable. However, we do not think that the issue of latency in any way undermines the case for a post-trade CT.

We do not consider that a CT should be mandatory to consume.

<ESMA\_QUESTION\_MDA\_16>

1. : 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.

<ESMA\_QUESTION\_MDA\_17>

We agree that real-time post-trade data is available from trading venues and APAs, including via data vendors and that the aggregated view offered by data vendors does not cover 100% of the market. <ESMA\_QUESTION\_MDA\_17>

1. : 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.

<ESMA\_QUESTION\_MDA\_18>

We agree with ESMAs assessment that data provision is typically timely. The more significant issue in our view is the inconsistency of format, diversity of delivery mechanisms, and the length of time for which the information persists (see Q13).

<ESMA\_QUESTION\_MDA\_18>

1. : 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?

<ESMA\_QUESTION\_MDA\_19>

We agree that the post-trade data made available by trading venues and APAs is of inconsistent quality. The use of varying delivery mechanisms and data standards also makes it very difficult to consume the data to achieve a consolidated picture of the market. This is particularly detrimental to investors efforts to assess best execution.

<ESMA\_QUESTION\_MDA\_19>

1. : 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?

<ESMA\_QUESTION\_MDA\_20>

We agree that that requiring trading venues and APAs to provide post-trade data in a standardised format would make the data significantly more usable. One would hope that it would consequently decrease the cost for data vendors of providing that data and so the downstream cost to investors. However, we do not consider this to be a substitute for a CT (see Q21).

<ESMA\_QUESTION\_MDA\_20>

1. : What are the risks of not having a CTP and the benefits of having one?

<ESMA\_QUESTION\_MDA\_21>

It is our view that a real-time post-trade CT will meet a need for a single, neutral, and consequently authoritative source of information on the market as a whole that investors can rely on for a reliable assessment of their trading performance. More consistent and higher-quality reporting from trading venues and APAs, although desirable, would not fully meet this need. Furthmore, the cost involved in subscribing for and consuming post-trade data from multiple sources (whether via a vendor or directly) continues to be prohibitive for all but the largest market participants.

<ESMA\_QUESTION\_MDA\_21>

1. : 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.

<ESMA\_QUESTION\_MDA\_22>

We would support an industry-led initiative to improve data quality and the use of harmonised standards and we recognise that the optimal outcome of such an initiative might be further guidance from ESMA to support its conclusions.<ESMA\_QUESTION\_MDA\_22>

1. : 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?

<ESMA\_QUESTION\_MDA\_23>

No.

<ESMA\_QUESTION\_MDA\_23>

1. : Do you agree that the mandatory contribution from trading venues and APAs to a CTP would favour the establishment of CT?

<ESMA\_QUESTION\_MDA\_24>

Yes, we agree. We would also argue for such mandatory contribution to be on a fee-free basis for the CTP to ensure that the resulting CT is affordable for the widest possible audience.<ESMA\_QUESTION\_MDA\_24>

1. : 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.

<ESMA\_QUESTION\_MDA\_25>

As stated above, we strongly support mandatory contribution and we would argue for such mandatory contribution to be on a fee-free basis for the CTP to ensure that the resulting CT is affordable for the widest possible audience. In our view, establishing criteria for determining the price that CTPs should pay for input data would lead to avoidable complexity. Given the recognition by ESMA that the existing RCB framework has not delivered on ‘reasonable commercial’ pricing for market data, we would not be confident that relying on the RCB framework would be sufficient to ensure that the CT is a success.

<ESMA\_QUESTION\_MDA\_25>

1. : 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.

<ESMA\_QUESTION\_MDA\_26>

We do not consider that a CT should be mandatory to consume. In our view, demand should arise naturally for a quality CT, in particular where the cost of its establishment is successfully managed by mandatory contributions by trading venues and APAs on a fee-free basis.<ESMA\_QUESTION\_MDA\_26>

1. : Would mandatory consumption impact other rules in MiFID II and if yes, how?

<ESMA\_QUESTION\_MDA\_27>

We do not consider that a CT should be mandatory to consume. <ESMA\_QUESTION\_MDA\_27>

1. : 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.

<ESMA\_QUESTION\_MDA\_28>

We do think that the coverage provided by a CT should be as comprehensive as possible to reaggregate fragmented liquidity. If ESMA were to accept the principle of limited coverage, then we would strongly encourage ESMA to ensure that an analysis of whether one or another trading venue or APA should be included was not based solely on an analysis of that trading venue’s or APA’s volume, but also took into account whether a significant percentage of the market volume as a whole was made up of venues/APAs with a similarly small percentage of volume that was significant in the aggregate.

It is worth noting in the case of Fixed Income and FX that, given that the level at which the transparency requirements are set means that a significant percentage of market activity does not form part of the data set, even a CT in those markets that covered 100% of trading venues and APAs would still not give rise to a truly useful tool for for the purposes of trade reconciliation, transaction cost analysis and best-execution evaluation

<ESMA\_QUESTION\_MDA\_28>

1. : 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.

<ESMA\_QUESTION\_MDA\_29>

We support ESMA’s preferred model of a real-time CT and we do not consider the issue of latency to undermine the use case for a post-trade equity CT.

<ESMA\_QUESTION\_MDA\_29>

1. : Are there any measures (either technical or regulatory) that can be taken in order to mitigate the latency impacts?

<ESMA\_QUESTION\_MDA\_30>

See Q29.

<ESMA\_QUESTION\_MDA\_30>

1. : 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?

<ESMA\_QUESTION\_MDA\_31>

Generally, Virtu considers competition to be an important force for innovation and to guard against monopolies. However, one of the key advantages of a CT over the existing patchwork of data from trading venues and APAs is that it would provide a single authoritative view of the market. This benefit would be undermined if multiple CTPs were to arise. In addition, the proposal for mandatory contribution by trading venues and APAs on a fee-free basis might not be viable with respect to multiple CTPs. However, we could envisage alternative CTP providers for different asset classes.

<ESMA\_QUESTION\_MDA\_31>

1. : Should the contract duration of an appointed CTP be limited? If yes, to how many years?

<ESMA\_QUESTION\_MDA\_32>

We would support a minimum contract period for a CTP to encourage potential providers to make the upfront investment in the business model. We do not have a strong view on whether a maximum contract period should be imposed on a CTP, provided that there are robust governance procedures in place that ensure effective regulatory oversight of the CTP.

<ESMA\_QUESTION\_MDA\_32>

1. : 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?

<ESMA\_QUESTION\_MDA\_33>

We agree with ESMA’s proposed model whereby the CTP would be entitled to recover the costs for consolidating an distributing the data plus an appropriate margin to be further specified by ESMA. As stated in our answer to Q14, we consider that the viability of this charging model is dependent on the cost of the input market data being eradicated from the equation.

<ESMA\_QUESTION\_MDA\_33>

1. : 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.

<ESMA\_QUESTION\_MDA\_34>

We agree that a revenue redistribution model may be a successful way of ensuring that the trading venues and APAs are compensated for their contribution to the CT.

<ESMA\_QUESTION\_MDA\_34>

1. : 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?

<ESMA\_QUESTION\_MDA\_35>

Although we would certainly see value in an EU27 CT, the most valuable solution for market integration would be a combined CT that included the UK and Switzerland.

<ESMA\_QUESTION\_MDA\_35>

1. : In your view, how would an EU27 CT impact the level playing field between the EU27 and the UK? Please explain.

<ESMA\_QUESTION\_MDA\_36>

Provided that the basis for establishment of an EU27 CT facilitates market integration and does not impose excessive cost on subscribers, we would not anticipate it negatively impacting the level playing field between the EU27 and the UK.

<ESMA\_QUESTION\_MDA\_36>