European Securities and Markets Authority
103 Rue de Grenelle
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By online submission - www.esma.europa.eu

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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 – AIMA and MFA response

Dear Sir or Madam,

The Alternative Investment Management Association[1] ("AIMA") and Managed Funds Association[2] ("MFA"; collectively, the "Associations") welcome the opportunity to respond to the European Securities and Markets Authority ("ESMA") regarding its Consultation Paper[3] "MiFID II/MiFIR review report on the development in prices for pre- and post-trade data and on the consolidated tape for equity instruments" ("the CP").

We greatly appreciate ESMA's work on the topic of market data and its willingness to consider possible enhancements to the existing regulatory framework. We are also pleased that ESMA is taking this

[1] AIMA is the global representative of the alternative investment industry, with more than 1,900 corporate members in over 60 countries. AIMA's fund manager members collectively manage more than $2 trillion in assets. AIMA draws upon the expertise and diversity of its membership to provide leadership in industry initiatives such as advocacy, policy and regulatory engagement, educational programs and sound practice guides. AIMA works to raise media and public awareness of the value of the industry. AIMA set up the Alternative Credit Council ("ACC") to help firms focused in the private credit and direct lending space. The ACC currently represents over 100 members that manage $350 billion of private credit assets globally. AIMA is committed to developing skills and education standards and is a co-founder of the Chartered Alternative Investment Analyst designation (CAIA) – the first and only specialized educational standard for alternative investment specialists. AIMA is governed by its Council (Board of Directors).

[2] Managed Funds Association (MFA) represents the global alternative investment industry and its investors by advocating for sound industry practices and public policies that foster efficient, transparent, and fair capital markets. MFA, based in Washington, DC, is an advocacy, education, and communications organization established to enable hedge fund and managed futures firms in the alternative investment industry to participate in public policy discourse, share best practices and learn from peers, and communicate the industry's contributions to the global economy. MFA members help pension plans, university endowments, charitable organizations, qualified individuals and other institutional investors to diversify their investments, manage risk, and generate attractive returns over time. MFA has cultivated a global membership and actively engages with regulators and policymakers in Asia, Europe, the Americas, Australia and all other regions where MFA members are market participants.

[3] ESMA70-156-1065. Online at: https://www.esma.europa.eu/sites/default/files/library/esma70-156-1065_cp_mifid_review_report_cost_of_market_data_and_consolidated_tape_equity.pdf.

opportunity to address various issues related to market data costs, including data availability and the establishment of a consolidated tape ("CT") for equities trading in the EU. This is a vital step in the context of delivering Capital Markets Union ("CMU") and creating a more transparent and accessible trading environment for institutional and retail investors alike. It is also essential to fostering the growth of the digital economy and positioning Europe as a leader when it comes to innovation in financial services and the broader economy.

The members of our Associations are investment managers who invest on behalf of pension plans, university endowments, charitable organizations, family offices and other institutional investors, among others. Our members engage in a broad range of investment strategies and use market data from trading venues, investment firms and third-party data vendors in the course of their activities.

Market data has, over time, become more important to firms' activities. In part, this reflects the reality that access to accurate, timely data concerning the price and timing of trades, as well as bids and offers, is vital to succesful implementation of any investment strategy. In addition, various regulatory requirements have essentially required firms to increase their consumption of data and ability to process that data, including: requirements relating to monitoring of execution quality; regulatory reporting requirements; rules on inducements; asset valuation requirements; and data security, risk management and business continuity requirements (such as maintenance of redundant feeds and archives). This need for data is amplified by the fragmentation of trading activity across multiple venues, each with its own data products.

Despite the objectives of MiFID II and world-wide trends in declining costs of computing and data storage[4], many trading venues have continued to increase market data fees year-after-year, with published research highlighting an increase in fees net of inflation in the range of 30-60% since 2008 for certain venues.[5] The increased market data fees come even in spite of the recent mergers in the exchange industry, which promised to save costs as a result of the consolidated IT networks and shared storage facilities.[6] This in turn has had a major impact on firms of all sizes in the investment management industry. Given the increasing data costs, smaller firms in particular face a high barrier to entry and might in practice be prevented from accessing certain markets or implementing certain strategies as a result of data costs. This is true for both investment management firms and brokers, as fewer firms find it cost-effective to trade in certain ways or execute orders themselves because of the high cost of market data.

We note that the stability of any marketplace is preserved by the presence of a diverse group of direct market participants, making their trading decisions independently of each other. We are, therefore, concerned that trading venues, through dominant market power are pricing out many market participants, leading to fewer independent decision makers as market participants either stop trading

[4] See, for example, the US Consumer Price Index for Information Technology, Hardware and Services Chart, which shows a steady decline in costs over the last several years. Online at: https://ycharts.com/indicators/us_consumer_price_index_information_technology_hardware_and_services_unadjusted.

[5] Copenhagen Economics, Pricing of Market Data (November 2018). Online at: https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/6/466/1543587169/pricing-of-market-data.pdf.

[6] We note also the findings of the January 2019 IEX report with regard to the United States market: *The Cost of Exchange Services: Disclosing the Cost of Offering Market Data and Connectivity as a National Securities Exchange*, at https://iextrading.com/docs/The%20Cost%20of%20Exchange%20Services.pdf. We believe that a similar study addressing the European market would be helpful in providing important information regarding market data practices.

or choose to access a market through a broker's execution algorithm. This reduction in independent decision makers increases the risk of herd behavior, as it involves more market participants executing their trades on the basis of the similar trading parameters.

We also take this opportunity to emphasize the acknowledgement made by ESMA at the outset of the CP that "[a]lready back in 2010, when consulting on the review of MiFID I, the EC stressed that prices for trading data were considered as being too high" (CP, p.10). While the CP notes that trading venues have mounted a vigorous defence of the way in which they charge for market data, we argue that the trend of the last decade can in no way be characterized in terms of prices being "brought down" to a reasonable level. We believe the opposite is true: prices have increased, charging structures have become more complicated, and the regulatory expectations for users to consume data have increased significantly. Regulatory intervention is needed as a matter of urgency, particularly as we are discussing aggregated trading data of market participants and not data that trading venues have enhanced through added analytical insights.

In the detailed comments that follow in Annex 1, we make the following points:

Trading venues and other market data providers are exploiting market participants' need for data

- Market data costs have increased since the application of MiFID II for both equities and non-equities markets.

- Trading venues have been able to increase proprietary and consolidated market data fees by changing the terms of licensing agreements, creating new categories of fees and redefining and recategorizing fees. The increased focus by venues on "non-display" applications of data is an unfair and conceptually flawed approach that stifles innovation, whilst overlooking the fact that market data is ultimately a by-product of participants' trading activities.

- Trading venues have in some cases aggressively pursued audits of market data licensees, reviewing usage over several years and taking advantage of ambiguous licensing terms.

- Data disaggregation has not in the experience of our members resulted in lower costs for market data.

The MiFID II goal to improve access to accurate, timely market data has not been realized

- Many trading venues and APAs also continue to fail to fully comply with the requirement that data be published free of charge after 15 minutes, which should be a priority area of enforcement.

- The fact of increasing fees and complexity of data policies is itself clear evidence that venues are not complying with the spirit of the MiFID II framework.

- While improvements to the existing publication standards and guidance would be welcome, ESMA should explore seriously the possibility of going beyond the existing "transparency plus" model by limiting data charges by reference to costs (ESMA has already established a possible model for this approach in the long-run incremental cost-plus methodology (LRIC+)). This would ensure that trading venues and users are in a more equitable position when it comes to the attribution of costs and benefits associated with market data.

Policymakers should act to introduce a Consolidated Tape and bring down data costs

- A post-trade CT would deliver clear benefits to all market participants, whether institutional or retail, and is long overdue. We see establishment of a post-trade CT as a vital next step in delivering CMU, relevant to both equities and non-equities asset classes.

Regulators must do more to foster consistency in terminology and provide better reference data

- ESMA could play an important role in developing standardised market data definitions. These should ideally be agreed among members of IOSCO to ensure that there is not undue variation across jurisdictions when it comes to the terms employed in market data policies.

  Better ESMA guidance is necessary in respect of data standards and we strongly encourage ESMA to prioritise its work to develop further the role it plays in this respect, focusing in particular on the scope and accuracy of FIRDS data.

If you would like to discuss any aspect of this submission further, please contact Adam Jacobs-Dean (ajacobs-dean@aima.org) and Jennifer Han (jhan@managedfunds.org).

Yours truly,

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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.

Our members' experience is that market data costs have increased since the application of MiFID II for equities and non-equities markets either directly through data product price increases or indirectly through changes in a trading venue's user policy which, for example, may require a market participant to purchase additional licenses or change a market participant to a more expensive user category. This reflects a broader trend extending back at least a decade and we note that the fact that market data costs are excessive and in need of being reduced was a key policy consideration when MiFID II was adopted. As such, it is important that trading venues be pushed to demonstrate that costs have indeed decreased, rather than merely seeking to rebut users' assertions of data cost increases.

We have, however, found it challenging in practice to collect consolidated industry data relating to price increases, reflecting:

- the competition law constraints to which trade associations and market participants are subject in the EU;
- the use of non-disclosure agreements by trading venues to limit the ability of users to discuss the nature of market data services and pricing that they have obtained. This itself runs contrary to the logic of the MiFID II framework which promotes the idea of transparency in pricing;
- the shifting categorization of data applications and terminology, making coherent comparisons over time more challenging;
- the significant commercial risks for individual data users of being perceived to be taking a stand against the unreasonable practices of trading venues; and
- the fact that market data is necessary for participation in the financial markets and excessive data costs are a barrier to entry – it may well be that data users are unable to purchase the most egregiously priced data and modify their trading strategy in response.

We therefore encourage ESMA to continue to engage with firms on an individual basis and also believe ESMA should take advantage of the supervisory information collected by competent authorities in the course of their supervisory activities and incorporate it, as appropriate, in ESMA's MiFID II review.

It would also be helpful if ESMA explored the extent of turnover in trading venues' market data clients to identify whether turnover levels have increased in light of the increasing cost and complexity of data licences.

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

One way in which trading venues have been able to increase proprietary and consolidated market data fees is by changing the terms of licensing agreements, creating new categories of fees and redefining and recategorizing fees. In the quest for greater market data revenue, exchanges have unbundled products and charged higher fees for the "new" products. Currently, fees related to market data licensing may include: access fees, site fees, distribution fees, display fees, delayed data fees, non-display fees and fees for creating and storing derived data/work. In this context, almost any central application consuming real-time market data such as profit and loss calculation, risk management and portfolio valuation is likely to be captured as a non-display application and therefore attract higher fee levels.

The objective of MiFID II was to lower data costs, and MiFID II requires that trading venues provide data on a RCB. As such, the price of data should be based on the cost of producing data and not, as argued by trading venues, on the value of the data to individual market participants. This undue focus on the way in which data is being used by those who purchase it is, in our view, extremely harmful to the functioning of the market and has no obvious parallels in related sectors: users should not be constrained in how they use a product which is ultimately derived from their own trading activities rather than any involved work on the part of trading venues.

Further adding to the complexity, there is no standardization in terms of how concepts are defined and interpreted by trading venues, nor of the procedures they adopt, which makes it harder for investors to compare the cost of different exchanges' proprietary market data products.

At the same time, trading venues have in some cases aggressively pursued audits of market data licensees, reviewing usage over several years and taking advantage of ambiguous licensing terms. Anecdotally, we found that it is not uncommon for licensees to have incorrect understandings of the license agreements due to the divergence in licensing practices and vagueness in terms, and to be asked to pay fees retroactively along with monthly interest fees (at sometimes non-market rates) on retroactive payments. Based on a small sample of members, we estimate firms spend an average of 30 business days of employee time per audit in relation to addressing and responding to a market data licensing audit.

Finally, we note that trading venues continue to assert that execution and data are a joint product as a way to avoid scrutiny of the level at which they are pricing data. We are of the view that this assertion is flawed. Market data generated by trading venues is fundamentally a historical record of submitted orders and executed trades. To the extent that the cost of providing market data is relevant for pricing purposes, the relevant measure should be limited to the marginal cost of producing and disseminating market data above and beyond all the costs incurred in providing execution services – the fact that recent data fee increases are well in excess of venues' investment in execution and trading systems confirms that data fees are not meaningfully connected with the provision of execution services.

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.

In addition to the points identified by ESMA, we have also seen trading venues:

- Take a more aggressive approach to multi-entity licences; historically, firms may have had licenses based upon the number of fund strategies. In recent years, trading venues have changed their policies with respect to the number of licenses a firm may need to purchase based upon different ways that they may use the data.

- Require market participants to provide information on how the data is intended to be used (e.g., is it for P&L systems, risk systems, pre-trade or post-trade analytics, financial models etc.). This information is irrelevant to the trading venue and presents yet another obstacle to obtaining market data. To the extent market participants are only using the data for internal purposes, (i.e., not selling it to third parties) they should not be required to provide this information.

- There has been no clear offering of unbundled market data services. Whilst packaged market data products are not necessarily a problem because they may offer market participants a better overall price, CDR 2017/565 requires market data providers to both offer and price services on an unbundled and disaggregated basis.

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.

We do not believe trading venues/APAs/SIs are complying with the RCB provisions for all the reasons discussed above. Given the objective of MiFID II, we understand RCB to be tied to the cost of market data, rather than a more intangible factor, such as "value" of data to individual firms.

ESMA has itself found that a material number of trading venues and APAs do not fully comply with the rules requiring venues to publish information on how they comply with MiFID II provisions on "reasonable commercial basis" ("RCB"). For example, 17% did not disclose the revenues from market data as required. It is also important to consider the quality of the information disclosed as much as the disclosure itself. As noted in our response to the subsequent question, our view is that information disclosed is not of sufficient quality to form a view on the manner in which venues comply with the provisions; at the same time, the fact of increasing fees and complexity of data policies is itself clear evidence that venues are not complying with the spirit of the MiFID II framework.

Our members are also concerned that trading venues and APAs are still not complying with the spirit of MiFID II's requirement that post-trade data should be provided free of charge after 15 minutes. We welcome ESMA's Q&A[7] on the topic, but also request that ESMA clarify that, where trading venues and APAs provide this information free of charge after 15 minutes, they remain subject to a distinct obligation to publish information on their compliance with RCB provisions.

Finally, we note that with respect to non-equities SIs, more work is required to fix the interpretation of "traded on a trading venue" before compliance with the data publication provisions can be assessed. At the moment, most off-venue derivatives transactions are considered not to be "ToTV", and therefore are excluded from the transparency regime. We believe that changes should be introduced to the ESMA assessment around ToTV to ensure that instruments that are economically identical to derivatives traded on MTFs and OTFs are also subject to the MiFID II transparency regime.

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[7] ESMA Questions and Answers on MiFID II and MiFIR transparency topics (ESMA70-872942901-35), 12 July 2019, Question 10. Online at: https://www.esma.europa.eu/press-news/esma-news/esma-updates-its-qas-mifid-ii-and-mifir-transparency-topics-0.

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.

Feedback from our members suggests that there is limited value in the information published by trading venues in respect of their compliance with MiFID II RCB provisions on market data. As noted in our response to Question 7, we believe that there are steps that ESMA could usefully take to ensure that the data that is published is more meaningful.

Indeed, a review of disclosures by key trading venues illustrates the limited value of current disclosures, which typically provide little more than: high-level regulatory context, a superficial description of the need to allocate "joint costs" (something which itself is questionable), and links to additional policies and pricing menus. The disclosure might also form part of a broader library of dozens of lengthy documents, with little prominence given to the RCB information, if it can be located at all.

We would therefore encourage ESMA to consider fully whether a more fundamental reworking of the European approach to regulating the provision of market data is now warranted; as we comment later, we believe that a cost plus approach might offer the only realistic prospects for reduction in data costs over the medium term. In any event, we believe ESMA should make clear that RCB means with respect to the cost of data production.

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.

Members of the Associations report that trading venues frequently repackage data into different market data products they offer. The use of vague and ambiguous market data policies by venues facilitates this unfair practice by creating significant uncertainty as to how market data can be used. It also increases the level of reporting and development required by firms to manage access control by their data users.

Further, members are concerned that trading venues rely on flexible interpretations of regulations relating to RCB criteria in order to justify some of the practices we note above in response to Question 4. For example, Article 86(2) of CDR 2017/565 permits trading venues to charge differential rates to different *categories* of customers where the differential rates are proportionate to the value of the market data to such customer taking into account:

(a) the scope and scale of market data including the number of financial instruments covered and trading volume; and

(b) the use made by the customer of the market data, including whether it is used for the customer's own trading activities, for resale or for data aggregation.

In our view, the second limb of the provision is principally intended to allow for different pricing based on the distinction between categories of customers, i.e., (i) an end user who simply wants to consume the data in its own analysis, and (ii) a commercial re-seller/aggregator, who is in the business of data commercialisation. Instead of this approach, market data providers appear to be reading the above provision to justify requiring detailed and intrusive disclosure of the market data user's own consumption. As ESMA notes: "some data users complain that trading venues as well as data vendors request a share in profits generated by the direct use of market data" (CP, p.12). In our view, this is not a reasonable commercial basis for market data pricing.

We therefore believe that ESMA could play an important role in developing standardised market data definitions and interpretive guidance on RCB requirements. These should ideally be agreed at the level of IOSCO to limit variation across jurisdictions when it comes to the terms employed in market data policies. ESMA and NCAs should also ensure that relevant transparency requirements are fully enforced, such as the granularity of data provided by venues and APAs.

This work should also extend to the structure of the audit process, given that venues frequently exploit the increased complexity in market data policies to achieve a favourable financial outcome following external audit by the venue or its third-party auditor. The reliance on audits undertaken subject to confidentiality years after the data has actually been consumed further obscures the true costs of market data and does not seem consistent with the goal of upfront transparency regarding how costs are calculated and imposed on end users. The reliance on audits also begs the question: If periodic auditing is the favoured method to definitively establish what end users owe for their market data use according to the venues, then why would a periodic audit of the venues to determine that their cost structures are consistent with the rules not also be appropriate?

One further area where additional disclosure may be useful is around the amount of waivers and deferrals that are being applied by trading venues and APAs in a specific sub-asset class. If a significant percentage of trading activity is benefiting from a waiver and/or deferral on a specific venue or APA, then this may be relevant for a market participant assessing how much value to ascribe to a real-time data feed provided by the venue or APA. We recommend that ESMA propose this additional disclosure be provided by trading venues and APAs.

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.

As noted in our response to Question 6, we question whether the "transparency plus" is sufficient to achieve the legislative goals that underlie the MiFID II framework and agree that an alternative approach should be considered. The transparency plus approach had the potential to achieve the legislative goal of reducing market data costs. However, as the RCB concept has been construed in a variety of inconsistent ways by the market data providers, we now believe that the transparency plus model is not sufficient to achieve the legislative goals that underlie the MiFID II framework and agree that an alternative approach should be pursued.

The transparency plus model already assumes that trading venues can compute the production costs associated with market data in order to demonstrate that their pricing is reasonable; however, the broad dispersion in data revenues across exchanges and poor comparability of published information suggests that the existing model leaves too much latitude to trading venues to define their own approach in this context. It might therefore be necessary to establish a formal regulatory standard for calculating data production costs and use this as a basis for a cost plus approach (cf. LRIC+) to ensure that trading venues and users are in a more equitable position when it comes to the attribution of costs and benefits associated with market data.

Further, as each trading venue is a natural monopoly (as market participants will gravitate towards the venue which has the highest liquidity for each individual product), venues are able to set rates at their discretion without the fear of losing customers. Subsequently, going beyond the existing transparency plus model may be appropriate to avoid trading venues charging higher rates that do not reflect the true underlying costs of market data.

Q10: Did data disaggregation result in lower costs for market data for data users? If not, please explain why?

Data disaggregation has not in the experience of our members resulted in lower costs for market data. Unfortunately, it seems that well-meaning regulatory provisions have actually strengthened the commercial dominance of trading venues and enabled them to redefine their data offerings in a way that is designed to extract additional revenue from the user community. Indeed, members report that some venues have used this provision as the basis for increasing data fees, arguing that the dissemination of disaggregated data brings additional costs.

Q11: Why has there been only little demand in disaggregated data?

Members believe that it is not the lack of demand that drives the problem behind disaggregated data, but rather the way in which the rule has been drafted. Specifically, we note that the obligation to provide data on a disaggregated basis operates at the asset class level (rather than instrument level). We believe there would be greater demand for disaggregated data if it could be obtained at the product/instrument level, given that an entity that is active in either the equities or fixed income space will very likely trade only a subset of the instruments in the relevant market.

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

Our members report that the requirement to make data available free of charge 15 minutes after publication is still not being complied with in many cases. In particular, our members have noted the following issues with the APAs:

- Requiring users to create a user account to sign in to access the pre- and post-trade data. Creating this account often requires the user to accept an onerous legal agreement which requires review from counsel and can delay access to the services;

- Imposing terms and conditions on the end-use of market data that goes above and beyond regulations;

- Not providing data that is machine-readable (e.g., preventing or restricting the download of data or making the download of data as onerous as possible (with little technical guidance or charging for a support service to provide technical guidance));

- Not providing the delayed data for the full 24-hour window thereby restricting access to it (e.g., the data feed is constantly being refreshed with the oldest data being deleted even though it is less than 24 hours old); and

- For non-equities asset classes, certain trading venues and APAs are still not providing the required data free of charge.

All of these practices clearly violate the MiFID II requirements and subsequent ESMA guidance. We believe that ESMA and national competent authorities ("NCAs") should continue to focus closely on trading venues' practices in this area and take appropriate supervisory action where necessary.

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.

We believe that the existing supervisory guidance is clear, but further enforcement action is necessary. Compliance with this requirement is critical to ensuring that all investors, both retail and institutional, are aware of trading activity in the market and current market prices. This supports investor confidence, facilitates compliance with best execution, and helps investors hold liquidity providers accountable. And given the amount of data published and the number of different trading venues and APAs, the data must be provided in an accessible and useable machine-readable format to all types of investors as contemplated under MiFID II.

We also recommend that ESMA suggest formally codifying the requirement that both trading venues and APAs must publish the data in a machine-readable format while providing guidance on:

- The meaning of "machine-readable", which should allow for data to be downloaded and read by a program, without the need for any human intervention;

- Access to the data – i.e., it should be as straight forward as possible and not require user logins or security tokens (please see our comments on Q12 in this respect); and

- The time during which data is accessible should be clarified (i.e., a 24-hour period).

In addition, to the extent there continues to be material non-compliance in this area, ESMA should consider proposing a Level 1 change to remove the ability of trading venues and APAs to charge for regulatory-required delayed post-trade data on both an ongoing and historical basis (including amendments and corrections). This will remove the commercial incentive trading venues and APAs have to impede access to the data published free of charge.

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?

In our view, the lack of a commercial incentive to operate a CT is the primary reason why no solution has emerged to date. While the regulatory standards applicable to CTPs might also be a disincentive, it is not unreasonable to expect that a CTP be subject to an appropriate level of regulatory oversight given the central role of data to firms' activities (noting that data users themselves must operate within the parameters of a robust regulatory framework).

In order to remedy the current situation, we recommend that all trading venues and APAs be required to submit data to the CTP free of charge. Adding this requirement would transform the business case for a CTP.

Q16: Please explain what CTP would best meet the needs of users and the market?

We believe that a CTP should deliver low cost (or free of charge) consolidated post-trade data to market participants (supported by the mandatory submission obligation on trading venues and APAs). This post-trade data should be provided in real-time and be comprehensive, covering all trading activity in the relevant instrument.

While we understand the focus on this consultation is on an equities CTP, we would also recommend that this be expanded to ETFs and non-equities asset classes, although there could be a different CTP per asset class.

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.

As part of analysing overall availability of data, ESMA should differentiate between the availability of post-trade data provided in real-time for a fee versus the availability of post-trade data provided free of charge. Market participants should have both options for accessing data directly from 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?

In our view, data quality issues should not prevent the establishment of a CT. Instead, the CT once established can assist in standardising reporting practices and in addressing data quality issues.

Q21: What are the risks of not having a CTP and the benefits of having one?

We agree with the benefits of having a CTP as outlined in the CP, including the creation of a single point of access to a broad dataset at lower cost for data users compared with sourcing data via multiple feeds. We believe this ultimately has the potential to be of great benefit to the market, while supporting the broader ambition of delivering a Capital Markets Union.

A post-trade CT will provide all investors with a reliable source of the current traded price and a view into trading activity across the market. This supports investor confidence, facilitates compliance with best execution, and helps investors hold liquidity providers accountable. In addition, a CT generally levels the playing field with respect to access to information, removing existing information asymmetries.

A post-trade CT exists in a wide variety of asset classes in the US, including equities, corporate bonds, municipal bonds, and OTC derivatives. In each, academic research has found that greater transparency has resulted in real benefits for market participants in terms of better liquidity and more competition. While we understand the focus on this consultation is on an equities CT, we would also recommend that this be expanded to non-equities asset classes, although there could be a different CT per asset class.

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.

As a general comment, we believe that clear ESMA guidance is necessary in respect of data standards and strongly encourage ESMA to prioritise its work to develop further the role it plays in this respect; indeed, shortcomings in the quality of FIRDS data submissions have been a significant impediment for firms when it comes to timely and correct compliance with various European reporting requirements. Gaps in information provided by ESMA, including the absence of a central source of instrument-level firm SI status, also detract from the goal of ensuring that data provided to the market is consistent and comprehensive.

Q24: Do you agree that the mandatory contribution from trading venues and APAs to a CTP would favour the establishment of CT?

Yes, in our view this is one of the most important elements of a regulatory framework that supports the establishment of a CT.

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.

Trading venues and APAs should be required to submit to the CT free of charge. This will avoid the problems associated with the current RCB approach as detailed above, which could threaten to make the CT uneconomical and therefore commercially unattractive.

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 do not believe that policymakers should mandate consumption of CT data, particularly if this leads to a situation in which market participants carry costs for consuming data that they do no required. We believe in practice that the expectations placed on firms by other regulatory requirements will mean that demand for and usage of the data will be sufficiently widespread even without a mandate requiring its use.

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.

With respect to a post-trade CT, it is important that all trading activity in a particular instrument be included. Otherwise, the key benefits of a CT are undermined as market participants no longer have a reliable source of the current traded price and a view into trading activity across the entire market.

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, it is important that a post-trade CT publish data in real-time. Real-time data is necessary to provide market participants with a current snapshot of market trading activity. All the CTs established in the US, whether in equities, bonds, or OTC derivatives, provide real-time data.

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?

In order to maximise the benefit of a CT, we believe one per asset class makes sense.

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 note there would need to be adequate transparency around such a model provided to market participants, including CT total revenues and venue-by-venue distributions.

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?

A CT should ideally include UK data to be of maximum value; however, a CT covering EU27 data would still be helpful.