afme/ Finance for Europe

Consultation response

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

6 September 2019

Executive summary

The Association for Financial Markets in Europe (AFME) is grateful for the opportunity to respond to ESMA's consultation paper.

AFME represents a broad array of European and global participants in the wholesale financial markets. Its members comprise pan-EU and global banks as well as key regional banks, brokers, law firms, investors and other financial market participants. We advocate stable, competitive, sustainable European financial markets that support economic growth and benefit society.

AFME is the European member of the Global Financial Markets Association (GFMA) a global alliance with the Securities Industry and Financial Markets Association (SIFMA) in the US, and the Asia Securities Industry and Financial Markets Association (ASIFMA) in Asia. AFME is registered on the EU Transparency Register, registration number 65110063986-76.

Transparent trading and informed markets have a range of benefits for market efficiency and end-investors. The best way to achieve this is through the widespread availability of market data through easy and low-cost access. ESMA notes that "already back in 2010, when consulting on the review on MiFID I, the EC stressed that prices for trading data were considered as being too high" and data collected from AFME members shows that user spending on per user and non-display cash equities market data fees has increased since 2017. It is therefore clear that the goal of MiFID II/MiFIR to reduce the costs of market data is not being realised.

The underlying causes for this trend have been, among others, a regulatory obligation for firms to purchase data from venues in order to ensure compliance with best execution requirements and a market structure where dominant venues are able to cross-subsidise execution revenues with data fees and therefore maintain a significant trading market share.

AFME supports the MiFID II/MiFIR objective of reducing the costs of market data. However, it is clear that existing provisions requiring trading venues to provide data on a reasonable commercial basis have failed to achieve this goal.

<u>Proposed solutions</u>

AFME members believe that there is potential for a "transparency plus" model to either deliver on its objectives or lay useful groundwork for making a decision, at a later stage about whether a more direct approach is necessary. However, for the transparency plus model to be effective, AFME believes that enhancements are needed to Level 2 rules to make the provisions more specific and robust so that consumers of data and regulators are able to properly scrutinise the costs of production and dissemination of market data. In our view, this should include requiring trading venues to disclose quantitative and standardised information as to how a trading venue has allocated costs to the production and dissemination of market data which could then be compared with revenues.

If an enhanced transparency plus model cannot deliver on its objectives, AFME members envisage one of two approaches emerging as feasible, LRIC+ (as described by Copenhagen Economics) or a distribution-cost only model.

Consolidated tape

In relation to the consolidated tape ("CT"), AFME believes that an appropriately constructed CT could help to build deeper and more open capital markets in Europe. In line with the European Commission's vision for Capital Markets Union ("CMU"), a key aim should be to democratise access across European markets: to provide all investors regardless of resources or sophistication with a comprehensive and standardised view of European trading. A CT will however be of less benefit to market data consumers that are wholesale trading professionals or use electronic trading systems and smart order routers given that they require both full depth of book and lower latency. A CT would nevertheless benefit the wider market.

AFME members do not believe that a CT is a solution to the fundamental issues regarding the cost of market data and that the costs of market data must be addressed, regardless of whether there is a CTP in the EU. Nevertheless, the two issues are connected, as the success of a CTP is closely connected to the price at which it obtains input data from venues and APAs. Therefore, the provision of data to CTPs should be anchored closely to the broader price of market data. The data should be provided to a CTP on a 'reasonable commercial basis' with a discount in order to account for the costs of consolidating the data and to make it commercially viable to operate a CT.

Please note that this response covers market data and the consolidated tape for equities unless specific reference is made to other asset classes.

AFME response

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.

Having consolidated data from a variety of AFME members, AFME observes that costs have risen for equity instruments.

Whilst fees have risen for both per-user and non-display consumption of data, we have observed the most significant increases in charges for non-display consumption. Amongst AFME members surveyed there was, on average a 96% increase in firm expenditure on Level 1 and Level 2 non-display fees between H1 2017 and H1 2019. Within the same time frame there was, on average an 9% increase in Level 1 and Level 2 per user fees[1]. Please see the below anonymised tables which shows increases in expenditures per trading venue.

[1] Based upon a survey of 5 representative AFME members

Per user L1 and L2 market data expenditure per trading venue (H1 2017 to H1 2019)[2]

Year	Half	TV1	TV2	TV3	TV4	TV5	TV6	TV7	TV8	TV9	TV10	TV11	Average
2017	H1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2017	H2	4%	7%	4%	4%	9%	0%	6%	2%	2%	-1%	2%	3%
2018	H1	11%	10%	36%	16%	7%	9%	11%	-7%	8%	-4%	7%	9%
2018	H2	12%	5%	42%	20%	25%	3%	2%	-16%	2%	-3%	8%	7%
2019	H1	9%	11%	51%	16%	-3%	9%	12%	-13%	5%	-4%	1%	9%

Non-display L1 and L2 market data expenditure per trading venue (H1 2017 to H1 2019)[3]

Year	Half	TV1	TV2	TV3	TV4	TV5	TV6	TV7	TV8	TV9	Total
2017	H1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
2017	H2	0%	17%	5%	8%	22%	10%	11%	-4%	12%	10%
2018	H1	-27%	3%	7%	415%	61%	18%	151%	0%	28%	41%
2018	H2	-27%	0%	5%	439%	50%	35%	176%	-2%	20%	41%
2019	H1	-7%	66%	5%	417%	107%	76%	188%	55%	20%	96%

Increases vary by operator but clearly suggest that pricing remains driven by firms' need to consume the data rather than its cost of production and dissemination.

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

The underlying reason for the increase is a persistent market failure in the pricing of market data. MiFID II/MiFIR requirements that market data should be priced on a Reasonable Commercial Basis (RCB) have not addressed the failure so far.

We elaborate on the structure of the market failure, why we believe RCB has not addressed it and the ways in which it could be addressed in our responses to questions 5-9.

We briefly set out the structure of the market failure below however:

Consumption is not optional for intermediaries: Best execution requirements under MiFID II/R effectively require investment firms to consume market data in order to identify where best execution can be achieved at any point in time. It is not possible for an intermediary to provide an effective execution service without comprehensive data. Consumption is a condition of doing business.
Market share and pricing power are self-reinforcing for venues: The higher the market share that a venue has, the more obliged its participants are to consider it within their execution policies and therefore to buy its data. Use of data revenues to cross-subsidise execution fees allows a dominant venue to maintain a high market shares (allowing the cycle to perpetuate).

[2] Based upon a survey of 5 representative AFME members
[3] Based upon a survey of 5 representative AFME members

The resulting balance of power between providers and consumers of market data is evident in a number of areas which negatively affects consumers:

Higher Prices: Prices remain high and correlate closely to the venues which have the highest market shares in the securities with which they operate.

Complexity and Obfuscation: Application licensing has become very expensive and multi-layered which has facilitated price increases by obfuscating them. This complexity has been exacerbated by the fact that exchanges use different terminology and definitions when applying market data fees. This has created a situation where users have found it increasingly difficult to understand each policy and data use type.

Members have observed that data contracts are often composed of multiple tranches of pricing/fees. For example, there will be the underlying data cost, delivery cost as well as storage costs/right to use (including non-display fees, MTF and SI licenses and derived data fees) and redistribution fees. This leads to a duplication of costs and also makes it more challenging for firms to obtain access to real time data.

Terms of Business: Trading venues have the ability to exert power over consumers of market data by imposing stringent contractual terms. This fact demonstrates that asymmetries of power exist between trading venues and their members/participants and is a window into the nature of the relationship.

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)?

Firms have observed that exchanges are increasingly licensing data for narrowly defined use (based on corporate entity, business divisions, named users, location and/or usage type). Members are then required to agree amendments or separate agreements for relatively minor changes in scope. This includes exchanges licensing separately for systematic internaliser requirements (separate and distinct from non-display fees already paid for) resulting in members being required to pay twice for the same data.

This minimises consumers' flexibility to use data, adds significantly to the time and cost of agreeing market data contracts (for both parties) and makes compliance and control more difficult.

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.

Fee policy and terminology differs by trading venue. The lack of standardisation makes it very difficult to manage and ensure that users are compliant. An example of this is the Unit of Count (UOC) policy, where it appears that trading venues have wide ranging views on UOC, making it difficult to report.

AFME members also note that provisions around audits in Exchange agreements are difficult to manage given the Exchange will not deviate from their T&Cs, which are often vague and open to interpretation.

A further key issue is that trading venues can, at any time, introduce new polices and new charges without prior consultation or approval (as observed with the introduction of additional charges for systematic internalisers).

We are also concerned by end of day data becoming subject to charges and derived data restrictions.

Please see our response to Question 8 for our proposals on how some of these issues could be resolved.

Fixed Income market structure differs slightly to equities markets, where there are far fewer EU venues through which institutional clients execute their business, for example

- Govt Cash bonds: three venues, with majority being executed on two venues
- Credit cash bonds: three venues, with majority being executed on one venue
- IRS Derivatives: two venues almost equally split
- Credit derivatives: two venues, with majority being executed on one venue

This trading concentration across a small number of venues raises the question around the strength of the incentives for venues to price competitively.

In addition there are a large number of Systematic Internalisers (SIs) reporting via a broad number of APAs. Given a significant volume of business is OTC and traded off-Venue via SIs, to get a complete picture of the fixed income market requires connectivity to all these APAs (and MTFs). These factors combined will influence the ultimate costs paid for data.

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.

AFME members would broadly agree that the majority of venues have made some kind of disclosure available in relation to RCB but would make two observations as regards the utility of the most operative elements of those disclosures regarding revenue, cost and price setting:

- Firms have found it difficult or in some cases impossible to access the information in a manner which might be considered easily accessible to the public.
- AFME members believe that it is arguable that the quality of the disclosures, where they have been obtained, does not always comply with the spirit of the provisions.

Whilst it is acknowledged that the costs that trading venues and APAs charge for accessing their data is generally made publicly available on their relevant websites, the information is often hard to find and difficult to interpret as it is not always clear what the various elements refer to. It is frequently embedded into the website requiring a complicated route to reach it and once found does not contain all the necessary information required or allow an easy comparison across data providers.

Members would welcome further improvements to the accessibility and standardisation/completeness of the pricing information provided by both trading venues and APAs.

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.

AFME members would agree in particular with two aspects of ESMA's assessment:

- That the information provided by trading venues does little to empower users to determine how the price of market data was set.
- The information provided does not allow any meaningful comparison of the approach taken between trading venues and APAs.

Documents which AFME members have been able to obtain and review typically provide the user with a qualitative list of general cost types born by the venue. They usually provide no substantive information as to the resulting costs which were considered as the basis for market data pricing nor the *reasonable margin* or *appropriate share* of joint costs included.

Furthermore, trading venues do not allow users to easily separate between the cost of data production and dissemination and the cost of operating a trading platform. For example, in their "Market Data Transparency Obligation Disclosures" statement, London Stock Exchange state that "London Stock Exchange Trading and Market Data businesses provide jointly produced services: a single technology platform facilitates both trading activity and data production and it is not possible to offer one service without the other"[4].

Another common approach is for trading venues to provide high level explanations of their methodology without providing supporting figures or relevant data. For example in its "Transparency Obligation for Market Data under MiFIR" statement, Deutsche Boerse states that:

"the determination of the relevant cost basis for the identification and assessment of the reasonable commercial basis of the fees set are the direct fixed and variable costs of the data business. As outlined above, those direct costs will be supplemented with attributable indirect costs and shared joint fixed and variable costs"[5].

Similarly, Bloomberg APA states that:

"the cost accounting methodology used to calculate the cost of producing and disseminating the market data has been direct identification of costs, plus an allocation of those costs based on expected volume of data generated by BDRS BV"[6].

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.

AFME members believe the usability and comparability of the RCB information could be improved by further developing Level 2 rules to make them more specific and robust. AFME believes that these amendments would help the RCB provisions to achieve genuine transparency as to the way in which the venue's data revenues are related to the cost of producing and disseminating the data provided.

<u>AFME proposals for enhancing the "transparency plus" model:</u>

In AFME's view, Level 2 rules should be more prescriptive and include the following elements to make disclosures under Article 11 of the delegated act effective:

- Require the disclosure of quantitative information on the specific costs which form the basis of market data pricing, rather than adopting principles (which can be obfuscated).

[4] https://www.londonstockexchange.com/products-and-services/market-data/realtimedata/pricesandpolicies/rcbdisclosure.pdf

[5] https://www.mds.deutsche-boerse.com/resource/blob/1334838/3c8268f3984369ea06aa20cb6ba47d07/data/MiFIR-RCB-documentation-english_V1_1.pdf

[6] https://data.bloomberglp.com/professional/sites/10/BDRS-BV-Data-Fees-Public-Disclosure-1.pdf

- Specifying the types of cost which are considered eligible or ineligible for inclusion in a venue's cost base for production and dissemination of market data (see Question 8 for rationale).
- Standardising the categorisation of such costs so that they may be compared across venues when declared.

We believe that the obligation under Article 11 of Commission Delegated Regulation 2017/567 to provide *"information on how the price was set, including the cost accounting methodologies used and the specific principles according to which direct and variable joint costs are allocated and fixed joint costs are apportioned, between the production and dissemination of market data and other services provided*" is not currently being adhered to at a meaningful level, given the information provided merely acknowledges the existence of a price-setting process (please see our response to Question 6 for examples of current RCB reporting). AFME recommends that ESMA considers specific guidance for this requirement.

An important element of arriving at an informative and comparable cost disclosure rests on specifying what are acceptable joint costs for inclusion in any cost base. AFME would also note that one way of making the calculation of a cost benchmark simpler to implement would be to limit eligible costs to only those which are incrementally necessary to support the production and dissemination of market data.

As an example of this approach: software costs necessary to maintain a matching engine would not be eligible, given that this is core to trading activity, however software costs to test and disseminate market data would be eligible for inclusion. This would provide for steps to be taken toward acting on the principles of an LRIC+ approach.

AFME members would defer to the studies published by Copenhagen Economics and IEX in terms of prescriptions and practical work which illustrate that the production of such cost data is practical.

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.

AFME members believe that, while the current RCB approach has not delivered a reduction in market data prices, there is potential for transparency plus to either deliver on its objectives or lay useful groundwork for decision making on more direct approaches if needed. We set out the reasons why, in our view, transparency plus has not succeeded together with the steps which we believe would be constructive in response.

<u>The existing provisions are open to interpretation between producers and users of data</u>

Article 7 of the delegated regulation states that:

1) The price of market data shall be based on the cost of producing and disseminating such data and may include a *reasonable* margin.
2) The cost of producing and disseminating market data may include an *appropriate* share of joint costs for other services provided by market operators or investment firms operating a trading venue or by systematic internalisers.

The words *reasonable* and *appropriate* are not defined in the context of Article 7. In particular, the resulting ambiguity as to what is an *appropriate* share of joint costs, provides for ample room for manoeuvre in deriving a venue's cost base and therefore justifying high market data charges. The provisions also fail to set expectations for what would constitute a *reasonable* margin over and above costs.

For this reason, producer groups have presented a number of arguments to support their view that the *appropriate* share of joint costs is a high one. AFME members, as consumers, and producers of data do not agree.

Incumbent stock exchanges, in particular, suggest that they play a, pivotal role in price formation, which they are uniquely able to provide through their status and without which, the wider market could not operate. In their view, a high share of joint costs is justified by the responsibility and reliance placed upon them.

AFME members disagree with this view and would assert that it only appears credible because of the distortions in the market which are brought about by the status quo. In other words, incumbent stock exchanges maintain the appearance of providing a pivotal role in price formation because the existing market dynamics force over reliance on the data of such venues.

As detailed in our response to Question 2, the status quo is maintained by a market failure: a venue with considerable market share in a security exerts high pricing power in the market data for that security. Participants must buy the data as a condition of access and to fulfil investor protection obligations (best execution). A venue in this position can then use high data revenues to cross subsidise ad valorem execution fees in that security (which are subject to competitive forces). This helps the venue to maintain its market share in the trading of the security and maintains its pricing power from a market data perspective.

The view that this is a healthy situation rests on a notion sometimes promoted by incumbent venues that price formation is inherently centralised. It is not; and whilst selective case studies have been used to show that markets stall when a primary market is unavailable, others show the opposite. AFME members would argue that what those case studies demonstrate is that the market often defers to the primary exchange until such time as it believes it is chronically unavailable at which point it will begin to form prices on the venues which remain available. The emphasis on an incumbent stock exchange as a central source of price formation is outdated and is a symptom of market failure rather than an argument for preservation of the status quo.

Breaking the cycle described above would lead not only to lower market data charges for consumers but encourage more open, more resilient and deeper capital markets in Europe.

For these reasons, AFME members believe that it is important that there is further specification in Level 2 rules regarding what is an appropriate share of joint costs and what is a 'reasonable margin'.

The existing transparency plus provisions and guidance do not allow consumers to assess the costs allocated to production and dissemination.

In line with to our response to Question 7: to be effective, disclosures under transparency plus approach would need to include quantitative and standardised information as to how a venue had allocated costs to the production and dissemination of market data which could be compared with revenues. This would allow consumers and regulators to assess and in the case of regulators, enforce, compliance with the RCB provisions.

AFME considers that the process of beginning to give detailed consideration as to which cost types were eligible; standardising those cost types and obtaining quantitative data on their contribution to the cost base would provide a number of benefits:

- It would set clearer expectations as to the expected outcome of the RCB provisions.
- It would make transparent the extent of compliance with the provisions.
- In the event that a reformed transparency plus failed to deliver on its objectives, it would allow regulators to:
  - Better understand the true complexity and burden of a revenue cap based on an LRIC approach before either discounting or committing to it.
  - If necessary, implement a revenue cap model on an informed basis which would reduce the often-cited risks of implementation.

Alternatives to transparency plus

If an enhanced transparency plus model cannot deliver on its objectives, AFME members believe that a revenue cap should be implemented based on an appropriate cost benchmarking methodology. For expansion, please see the response to Question 9.

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?

AFME members consider that a revenue cap is feasible but recognise that any approach has to balance concerns over complexity and implementation risk against effectiveness in reducing market data costs.

Further to our response to Question 7, AFME considers that steps can be taken to reform transparency plus model which would provide useful experience and data that would indicate the true burdens of implementing a cost-based revenue cap model. With this experience in mind, members envisage one of two approaches emerging as feasible:

- LRIC+ (as described by Copenhagen Economics)
- A distribution-cost only model

AFME members are of the view that both models have the potential to correct for the market failures we have described and would advocate further discussion as to the merits and drawbacks of each which would be better enabled in possession of the information that an enhanced transparency plus regime might provide.

We provide some further description as to our interpretation of a distribution-only model below as there is no alternative literature to that effect:

Under a distribution cost only model, venues could pass on only the marginal cost of distributing market data to a user which elects to obtain it directly from the venue along with a reasonable margin. A distribution cost only model would simplify the process of modelling costs but would still require rules to enforce the types of distribution cost considered eligible. Such a model would inherently place more of the burden of cost-recovery on trading fees rather than data fees. This model can be justified on the basis that, ultimately, the majority of the users of market data do so with the intent to trade the underlying security at some point in time; they will effectively pay for the costs of data production when they trade. AFME members note that this model would carry risks of producers recovering costs excessively through execution services in which competition is limited (such as execution in the closing auction). This risk would need to be factored into any application of the model in practice.

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

There has been limited demand for disaggregated data as the main users of market data are wholesale participants, generally using data on the whole European market to inform investment and execution decision making. AFME observes that when requested, disaggregated data when summed can often be more expensive than an aggregated package.

In equities, most participants in the market have a wide coverage across countries and sectors, and few firms specialise to a specific segment only, which means there is not enough broad demand for disaggregated data. Notwithstanding, certain more specialised players may benefit from disaggregated data as they are only interested in a specific part of the market. For example, if they are only interested in data relating to French trading venues or only for small caps.

Similarly, in non-equities, firms would offer a large range of access to fixed income liquid instruments, albeit that in certain fixed income markets, there are either limited market participants or products where disaggregation may be of benefit. Generally, the disaggregation of FI data has not led to a reduction in market data costs. Instead, this disaggregation of data has led to pricing at a "technical use" level. This has included regulated markets introducing a charging model for disaggregated data, which has seen investment firms incur additional separate charges for trading, risk, regulatory compliance, pricing and valuations for the same data.

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

Please refer to our answer to Q10 above. AFME also notes that the complexities and time-consuming nature around negotiating new contracts with TVs and APAs can be attributed to some of the lack of demand for disaggregated data.

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

Access to publicly available data (i.e. free data published after 15 mins) has improved but is not consistent between venues and still not easily downloadable or aggregated or restrictions are placed on its use.

Delayed data is not accessible in a systematic/machine readable format:

ESMA has clarified that it expects trading venues, APAs and CTPs to make pre-trade and post-trade data, available free of charge 15 minutes after publication in an easily accessible manner for all potential users using a format that can be easily read, used and copied. However, AFME members have observed that delayed data is not always accessible in a systematic/machine readable format in the same way as corresponding real-time data and firms are not able to make full use of the data provided as it is typically provided in a "view only" format.

Restrictions are placed on the use of delayed data

ESMA MiFID Level 3 Q&A codifies the requirement to publish information on post-trade data 15 minutes after publication free of charge as follows: "*The information made available free of charge 15 minutes after its publication should replicate the information published on a reasonable commercial basis but with a 15 minutes delay.*"

However, AFME believes that certain venues and APA's are not acting in accordance with the spirit of these requirements given the restrictions applied to this free of charge data. One APA has been observed to limit the permitted use of this data to display use and explicitly prohibits any creation of derived data. Further, in the event that we engage a distributor to access this data the distributor (who is not regulated under MIFID II/R) will apply fees which mirror the per user display fees for any other delayed data.

The simple version of "free after 15 minutes" public data by venues appears to be "over-simple" and not fit for any tangible purpose, leaving the user with little option but to take the higher priced service if they wish to access market data.

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.

AFME agrees with ESMA that there is merit in clarifying the concept of value-added services in the context of Q&A 9 by elaborating on the concept in Level 2 rules. Otherwise, in the short term AFME members would advocate rigorous enforcement of the existing guidance.

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. AFME members agree with ESMA's assessment in this area.

The potential number of trading venues and APAs that would need to be considered to develop a CT for equity and equity like instruments, means that a CTP could expect to pay considerable sums to maintain these multiple data feeds. Costs would ultimately need to be passed on to end users who would likely determine that the cost of consolidated data (and market data generally) is unreasonably high. The result of these circumstances is that despite the appetite for a CT, costs to consumers would limit the number of firms consuming CT data.

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.

Whilst AFME members agree with ESMA's assessment of the important factors that are hindering the establishment of a CT, they would note that other factors will limit the applicability and scope of such a tape. We elaborate on these points in the response to Question 16.

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

AFME members believe that the provision of an appropriately constructed CT can help to build deeper and more open capital markets in Europe. In particular, a key aim should be to democratise access to European markets: to provide all investors regardless of resources or sophistication with a comprehensive and standardised view of the European trading environment.

AFME members also believe however that practical and economic realities limit the application of a CT predominantly to human consumers of data: the depth of book and latency requirements that would be required to serve electronic trading consumers would likely lead to costs and complexities that would undermine the key aim of democratisation. For this reason, members also stress that a CT should not be thought of as a solution to the problem of market data costs: market data costs should be dealt with in their own right and an appropriate CT should be built upon cost-effective market data.

With these principles in mind, members are of the view that the following characteristics are desirable in a European CT

- It should be free to consume for retail users requiring data for one or two instruments at any point in time. Data should be made available to such consumers via a website or mobile application. This would remove any dependency on data vendors for retail access.
- It should be real-time and provide for the minimum latency that is meaningful for a human consumer. However, it is important that the CT respects the MiFID II/R deferred publication regime, such that trades which benefit from deferred publication are not published on the tape until after the deferral period has expired.
- It should provide both pre-trade (best bids, best offers) and post-trade data but this should not preclude the introduction of a post-trade tape as a first step. The requirements to provide subsequently pre-trade information should be factored into the approach however.
- A post trade tape should not include transactions which are technical (subject to conditions other than current market price). These are not considered 'addressable' by investors and rarely provide material information to them.

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.

AFME members note the likelihood of differing experiences for cash equities and other listed instruments on the one hand, and OTC asset classes on the other:

Equities and equity-like

- AFME members agree that post-trade data is available from both trading venues and APAs as well as data venues. Whilst members have not had the opportunity to formally assess whether there is 100% coverage, their experience is that (subject to cost) there is no material lack of coverage.

Fixed Income

From a fixed income perspective, there are over 19 APAs and more than 5 MTFs operating in this space. As each APA/venue requires agreements and licensing for each business application when consuming real time information vs publicly available data, it is almost impossible to assess whether 100% coverage is available at present (although we note that the 100% coverage requirement only applies to the consolidated tape for equity instruments.

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.

AFME members note the likelihood of differing experiences for equities and other listed instruments on the one hand, and OTC asset classes on the other.

AFME members generally agree that data is provided on a timely basis.

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?

AFME members note the likelihood of differing experiences for cash equities and other listed instruments on the one hand, and OTC asset classes on the other:

Cash Equities

Non-Addressable Liquidity: AFME members appreciate the guidance that ESMA has provided with respect to non-addressable requests for market data and believe this has been helpful. They would make points which they believe would benefit the construction of an effective CT:

Non-addressable trades are of little interest to the majority of investors and market professionals: they provide little useful price information and distort the industry's understanding of genuine liquidity. Moreover, it is difficult for practitioners (particularly less sophisticated ones) to distinguish these trades on existing trade feeds. By way of illustration AFME members would refer to the recent Oxera report on *the design of equity trading markets*: the authors of this report used data from a source (the Fidessa 'fragulator') that does not distinguish between non-addressable (non—price forming) liquidity when estimating the extent of OTC trading in Europe. They nevertheless asserted that the extent of OTC volume (which includes a very high proportion of non-price forming trades) constitutes a threat to price formation.

To ensure that investors have easy access to the trades that matter to them, AFME members would advocate that ESMA, in consultation with the industry, provides amendments to specify the list of OTC trade types (within table 4 of EU 2017/587) which constitute addressable liquidity. In addition, AFME believes that the CT should not, by default, present these trades to users unless they specifically request to receive non-price forming trades.

Fixed Income

Non-addressable liquidity: AFME members observe that unlike cash equities, no provision exists to identify non-addressable trades. Therefore, while in the cash equities context, these trades can at least be identified and excluded from analysis by market data consumers, in the OTC context they will simply be simply included in calculations. This is likely to lead to incorrect conclusions being drawn about the true state of liquidity.

Inconsistent reference data: The issues with inconsistent reference data extend far beyond the misreporting of equities instruments. AFME's fixed income members highlight discrepancies in the reporting of sub classes of bonds e.g. instruments within the same sub-asset class have been incorrectly classified and reported as both corporate and covered bonds by different entities. Members have also experienced divergences in the reporting of instruments between asset classes, with the same instrument(s) inconsistently reported as bonds, structured finance products and, or securitised derivatives.

Cross-asset

Duplicative reporting of OTC trades: Whilst AFME members recognize that the intent of the rules brought in under MiFID II/MiFIR was to clarify reporting responsibilities for OTC trades, they would also argue that the substance of those has had counterproductive consequences: the implied requirement for all firms to maintain trade reporting facilities even if they deal only with other investment firms, together with the need to assess whether a counterparty is a systematic internaliser in an instrument, have had two implications:

- To distribute trade reporting responsibilities across a much wider population of investment firms – thereby increasing the scope for communications errors.
- To increase the complexity associated with an individual firm in deciding whether or not to report a trade.

In the view of AFME members, these serve to increase rather than decrease the probability of inaccurate reporting. Whilst members would acknowledge that remedial action is outside of the scope of this exercise, they would that the reporting rules are reviewed in subsequent legislation along with deep industry consultation.

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?

From an equities perspective, AFME members do not agree that these deficiencies make it challenging to consolidate data in a real time feed.

In AFME members' view, enforcing greater consistency between providers of reference data into the various parts of the system would provide meaningful benefits in the consolidation and onward provision of market data.

AFME members observe that tackling these deficiencies are important to the eventual utility of such a feed.

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

AFME members believe that not having a CTP risks limiting the future development of European capital markets. Whilst sophisticated wholesale investors are able to access data, trading and post trade facilities on a pan European level, the infrastructure itself remains highly fragmented at member state level. Less sophisticated investors are more often penned into national silos by the cost and complexity of dealing with this fragmentation.

The best way to illustrate this is by looking at the European ETF market and the way it has developed versus the U.S. Given the level of fragmentation across listings and post-trade (clearing and settlement), most of the trading in European ETFs takes place off-exchange and is carried out mostly on behalf of institutional investors.

This has meant that unlike in the U.S. where ETFs have been widely adopted by retail investors, the retail market for ETFs in Europe remains embryonic and is limited to the domestic exchange, which arguably represents a very small portion of the market in a given ETF.

In addition, in the absence of a data offering allowing market participants to get a sense of consolidated ETF activity (on and off exchange) in real time, market participants typically assess the liquidity for ETF instruments on the basis of on exchange activity, which in many cases only represents a third of overall activity. This has been a serious challenge for the industry and has remained a significant barrier to the growth of ETFs in Europe.

By providing a truly consolidated view of ETF liquidity across the EU, a CT could be instrumental in supporting the growth of the ETF market in the EU. While AFME members would not argue that a CT is a solution that addresses deficiencies in other instruments in the same way, they believe the transparency and information a CT would provide would be an important catalyst for European markets to develop further.

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.

Yes. AFME members believe that industry-led initiatives conducted in close co-operation with ESMA and in which ESMA endorses standards which it agrees are fit for purpose are the most effective solution.

We believe that more work is required to improve the completeness of MiFID II data. Currently data is shared, as required, with APAs/vendors who disseminate some of this data accordingly. However, there are no checks in place to prevent clear errors, incompleteness or duplicative reporting.

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?

For non-equities, ensuring that ISINs are unique identifiers will increase the value of public transparency data where ISINs are used. AFME welcomed ESMA's recent collaboration with ANNA DSB to work on introducing a new field for "Term of Contract" in OTC derivatives ISINs. This shows a positive trend towards increasing the usefulness of ISINs for commercial purposes.

Equally, AFME notes that clear and consistent classification of instruments into CFI code (and subsequently into ISIN) and RTS 2 taxonomy underpin the consistent application of transparency across non-equities products. AFME is aware of initiatives for the industry to converge on a consistent approach and is supportive of these.

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

Yes. AFME agrees that the mandatory contribution of trading venue and APA data flows to a CTP would favour the establishment of a CT, given the need to ensure the data provided to a CTP represents the full market.

However, AFME members share ESMA's concerns around data quality and would therefore recommend that ESMA apply an obligation for trading venues and APAs to carry out data verification prior to sharing data with a CTP. We also agree that access to the required direct data feeds is costly and that it is not economically viable for a CTP to access every trading venue and APA (as mandated under Article 15, RTS 13).

In order to promote the viability of a CT, AFME members believe that steps should be taken to ensure that trading venues and APAs make their trade data available to CTPs. This is reflected under Article 90(3)(f) of MiFID II which states that the Commission shall,

"Ensure that trading venues and APAs shall make their trade data available to the commercial entity operating a consolidated tape appointed through a public procurement process run by ESMA at a reasonable cost."

In line with our response to Question 8, AFME is concerned that the term "reasonable" is not defined. We would therefore support measures to mandate the contribution of dataflows to CTPs. We discuss our preference on how this might be achieved in our response to Question 25.

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.

AFME members believe that elements from both options above could lead to the development of an optimal approach. On one hand, AFME would agree that the provision of data to CTPs by trading venues and APAs should be at a price that reflects an incentive for operators to enter the CTP business.

However, AFME also strongly believes that the price of data provided to a CTP should be anchored closely to the broader price of market data (albeit at a small discount to cover the costs of the CTP and provide an incentive for consumption). Our reasons follow.

In accordance with our response to question 16, whilst we believe that a CT can adequately replace the existing arrangements consumed by many professional individual users, a CTP will not be adequate (nor it cost effective to make it adequate) for the following classes of consumer:

- Wholesale trading professionals (who require full depth of book)
- Electronic trading systems and smart order routers (which require both full depth of book and very low latency to be effective)

AFME members are therefore very concerned that, should venues be required to provide data to CTPs on terms that are significantly more competitive than for other consumers, there is a high risk that data providers could simply make up for any perceived shortfall by charging higher fees to direct consumers of the data.

For this reason, AFME members believe it vital that the cost of market data is tackled in its own right, and through the measures discussed in our responses to questions 8 and 9 rather than through heavy discounting of CTP inputs.

With these principles in mind AFME recommends a model with the following characteristics:

- A CTP should pay per-user charges to producers based on the number of consumers that the CTP has attracted. In other words, a CTP should not pay to simply consume a feed; it should only pay the producers of its input feeds according to the number of users consuming its output product.
- The per user charges that a CTP pays to a producer should closely reflect the *reasonable commercial basis* prices available to any other consumer but with an explicit discount applied to help cover the costs of consolidation.
- The discount made available to a CTP should be regulated and should reflect the public good of providing a CT without creating a situation in which the price of a CTP inputs is significantly detached from those available to direct consumers.
- Consumers should be able to buy segments of the tape in a disaggregated fashion (for instance by country of listing)

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.

AFME members do not agree with the statement in paragraph 172 of ESMA's Consultation Paper that market participants consider mandatory consumption to be a success factor for the establishment of a CT.

AFME members are of the view that mandatory consumption would remove a critical indicator as to whether a tape is fit for purpose. Instead the focus should be on creating the conditions that foster a cost effective and high-quality tape. Where this exists, demand for the tape will follow naturally.

Another important factor to ensuring the success of a CT is ensuring users that choose to consume the tape do not incur duplicative market data costs as this would deter uptake of the tape.

Q27: Would mandatory consumption impact other rules in MiFID II and if yes, how?

AFME is aware that some concerns have been expressed that a CT would lead to a more prescriptive best execution regime than that which is currently in place. AFME members believe that the transparency associated with a successful introduction of a CT would promote better execution practices, particularly for retail investors. Members do not believe however that this would necessitate changes in the best execution rules nor that a tape would prohibit flexibility in execution practices where this is justifiable.

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.

AFME members agree that it is important to define the scope of data covered by the CT, particularly given the numbers of venues (regulated markets, MTFs, SIs), and APAs that exist within the EU. We consider that requiring the consolidation of 100% of transactions in equities instruments represents an unattainable goal, making the operation of a CT unattractive from an operator perspective.

Within its consultation paper, ESMA presents two options which could be used to ensure the successful establishment of a CT:

- reducing the percentage of covered transactions and;
- reducing the scope of covered financial instruments.

ESMA also suggests that combination of the two options could be utilised.

AFME recommends that ESMA opts for a combination of the two options. In our view, this ensures that a CT remains viable and that is not prevented by an insurmountable regulatory burden.

We recognise ESMA's concerns that reducing the percentage of covered transactions could limit the CT to the most liquid venues. To avoid this scenario, one potential solution is that the threshold of transactions to be included should be very high (e.g. over 99%). In our view, such a threshold would allow for adequate representation of relevant trading venues and APAs without risking an uneven playing field.

Alternatively, AFME would also support a staged approach which would mandate incremental increases in the required market coverage (e.g. 85% in Stage 1, 90% in Stage 2, 95% in Stage 3 etc). This would allow CTPs to demonstrate progress while also providing an achievable target with regard to the percentage of the European equities market covered by the CT.

In relation to the risks around reducing the scope of covered financial instruments, AFME members consider that potential CTPs will likely aim to maximise their instrument coverage to the extent that it is economically attractive. We therefore refer ESMA to our responses to Questions 24-26.

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.

AFME agree with ESMA's preferred model of a real-time CT. We share ESMA's concerns with regard to delayed publication and a tape of record.

AFME would re-iterate, in line with its response to Question 16 that, the term *real-time* in this context should refer to a level of latency which is indistinguishable to human consumers but which would be insufficiently low for automated consumers.

AFME would also emphasise that that the timing of the publication of the CT should respect the MiFID II/MiFIR authorised deferral regime, meaning that a trade which benefits from deferred publication should not be published on the tape until after the deferral period has expired.

Q30: Are there any measures (either technical or regulatory) that can be taken in order to mitigate the latency impacts?

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?

Allowing other entities to compete with CTPs offers the benefits of competition with regard to the provision of consolidated data, therefore AFME supports the notion of APAs or data vendors being allowed to compete with CTPs. This will avoid the risk of CTPs applying excessive fees and will encourage the provision of consolidated data in a cost-efficient manner.

Regarding, ESMA's concerns that the existence of numerous CTPs would diminish the number of users per CTP and therefore make the prospect of being a CTP less commercially attractive, AFME would like to emphasise that operators should be attracted to becoming a CTP because it is economically appealing. In order to ensure this is the case, regulators and policy makers need to address the pricing of market data (please see AFME's response to Questions 5-9).

Q32: Should the contract duration of an appointed CTP be limited? If yes, to how many years?

AFME would expect a small but not significant number of operators to apply to become CTPs if regulators and policymakers succeed in reducing the price of market data. In this scenario, AFME would expect there to be sufficient competition between CTPs, avoiding monopolistic practices whilst encouraging cost efficiencies. Therefore, AFME sees no advantage in limiting the contract duration of appointed CTPs.

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?

AFME members do not believe that they are in a position to provide an answer to this question at present. They are of a view that, in line with AFME's response to Question 25, tackling the issues raised under questions 5-9 is a precursor to deciding the fair charges for a CT: fees charged for a CT should reflect the cost of its individual components and these should be tackled in their own right.

Q34: Would you agree with the abovementioned model for the CT to charge for the provision of consolidated data and redistribute part of the revenues to contributing entities? If not, please explain.

Notwithstanding AFME's response to Question 25, AFME would support a model which would allow for (i) CTPs to recover costs plus an appropriate margin, and (ii) trading venues and APAs contributing data to the CTP being entitled to a certain part of the revenues of the CT. AFME also supports the concept of distributing such revenues in accordance with market share.

In the event that ESMA recommends the adoption of this model, AFME would suggest that trading venues and APAs provide data to CTPs for free. This will avoid a complicated scenario where trading venues and APAs are paid twice - firstly for the provision of data and secondly by recovering a share of revenues created by the CTP.

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?

AFME members believe that in order to provide a full view of European trading activity in equity instruments, a CT in a post-Brexit environment should reflect EU27, UK and Swiss trading activity.

We disagree with the assertion that an EU27 only CT would still have value and question whether there would be a commercial incentive to operators to provide such a service.

AFME therefore supports cooperation between the UK and EU27 (and other major jurisdictions) with a view to creating a CT that provides users with a complete and accurate view of European trading activity. Collaboration will be vital when seeking to avoid double reporting of OTC transactions via EU27 and UK APAs.

Q36: In your view, how would an EU27 CT impact the level playing field between the EU27 and the UK? Please explain.

AFME believes that the creation of an EU27 CT will be of low value and that by including UK trade data, this should allay any concerns with regard to the level-playing field between the EU27 and the UK.

AFME contacts

April Day	april.day@afme.eu	+44 (0)20 3828 2682
Sean Barwick	sean.barwick@afme.eu	+44 (0)20 3828 2670