Market data and Consolidated tape

FIA EPTA response to the ESMA Consultation Paper: *MiFID II/MiFIR review report on the development in prices for pre- and post-trade data and on the consolidated tape for equity instruments (ESMA70-156-1065)*

6 September 2019

About FIA EPTA

The FIA European Principal Traders Association (FIA EPTA) represents 28 independent European Principal Trading Firms (PTFs) that deal on own account, using their own money for their own risk, to provide liquidity and immediate risk-transfer in exchange-traded and centrally-cleared markets for a wide range of instruments, including shares, options, futures and ETFs. As market makers and liquidity providers, our members contribute to efficient, resilient, and high-quality secondary markets that serve the investment and risk management needs of end-investors and corporates throughout the EU. Our members are active participants on almost all European exchanges and platforms. Moreover, our members are important sources of liquidity for institutional investors accessing liquidity pools across Europe.

FIA EPTA supports transparent, robust and safe markets with a level playing field and appropriate regulation for market participants. We consistently support the aim of the market structure reforms laid out in MiFID II/MiFIR and welcome the opportunity to respond to this consultation on the cost of market data and the consolidated tape by ESMA. We stand ready to support ESMA with any further information it may require.

Executive summary

Cost of Market Data

FIA EPTA agrees with ESMA's assessment that user data fees are high and have increased over the past years. We also agree that new fees have been added and that market data policies and agreements are increasingly complex. In addition, existing rules and disclosures in relation to making certain market data available free of charge and the Reasonable Commercial Basis (RCB) provisions are not being fully complied with.

In order to address these issues, FIA EPTA would encourage ESMA, as a first step, to develop further guidance/Q&A and to work together with NCAs to ensure that existing rules are being complied with and enforced. Additionally, we believe more prescriptive rules need to be developed via Level 2 RTS (if necessary supplemented by Level 1 amendments to MiFID II) so as to ensure consistency and a level playing field across the EU. In our view, increased transparency around market data cost should be the primary near-term goal. We believe it would be premature to look at further regulation of market data (e.g., through price capping) before there is more transparency on the current costs and margins on market data.

Consolidated Tape (CT)
FIA EPTA supports the development of a real-time, post-trade European CT for the whole scope of equity instruments and equity-like instruments – and eventually expanded to additional (non-equity) instruments in the future. We believe a well-functioning, high-quality CT would benefit all financial markets participants and act as a catalyst for further integration of European capital markets and the realisation of an EU Capital Markets Union (CMU).

FIA EPTA believes that the reason why no consolidated tape provider (CTP) exists to date is that the cost to create this has been perceived as too high without adequate financial incentives. However, we believe this can be addressed by clarifying that trading venues and APAs must mandatorily contribute post-trade data to the CTP at no charge. To compensate exchanges and APAs, we believe revenues from the CTP should be allocated back, based on the contribution of the data to executed liquidity, weighted by value. To ensure the CTP will be non-conflicted and will deliver an effective, high quality and reasonably priced CT, FIA EPTA considers that a robust governance framework, reflecting the interests of all market stakeholders, must be put in place.

Additional considerations
By way of final comment, FIA EPTA would emphasise that a competitive market infrastructure is a key prerequisite to underpin well-functioning capital markets. We need to ensure that the infrastructure remains resilient and supportive of enhanced capital markets activity in the EU. In that regard, FIA EPTA would suggest to ESMA and other public authorities to consider whether the capital markets ecosystem remains sufficiently robust and fit for the future in light of the intensifying horizontal and vertical consolidation we are currently witnessing.

FIA EPTA has worked closely with its members and the Futures Industry Association (FIA) in the preparation of this reply. Further, as FIA EPTA's membership partially overlaps with the Netherlands Association of Proprietary Traders (APT), we therefore, wish to highlight the possible overlap in association responses to this consultation.

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.

FIA EPTA has observed market data prices increase across multiple segments both before and following the application of MiFID II. The largest increases were related to fees for systematic internalisation and non-display usage, with smaller increases in fees for display usage.

FIA EPTA agrees with ESMA's assertion that the diversity of exchange policies and fees combined with the fact that exchange price schedules and market data agreements can often undergo multiple updates each year, make it extremely challenging to analyse across exchanges.

In an effort to provide an empirical view into the data, we have provided a model use case (Excel model attached) for a small principal trading firm in which the usage characteristics remain broadly unchanged over a four-year period. In this model we have added meta data categories in order to normalise the types of fees charged across exchanges.

Model use case for a principal trading firm – assumptions with respect to the model use cases:

- The firm is active on a broad range of EU financial markets and trades both equities and equity-like products in addition to listed derivatives;
- In all cases the firm is subscribing to market data directly from the trading venues;
- Due to the highly integrated nature of EU and Swiss markets and in order to fully represent the costs to a principal trading firm based in the EU we have included SIX Swiss Exchange in our model;
- 10 display users;
- 15 non-display users;
- Up to 6 additional users under Risk/Compliance/Quality Assurance;
- Internal distribution within the group but no external distribution;
- Pricing is based on the most relevant update for each calendar year (normally by January 1 or within early Q1), except for certain cases as noted in the underlying Excel sheet where material changes were made to individual venue market data agreements mid-year;
- Any non-Euro prices were adjusted to Euro using ECB average rates for the relevant calendar year.

As shown in the tables below in our model use case, this hypothetical firm on aggregate would have seen its market data costs rise by ~27% between 2016-2019 (from €917k to over €1.16m).

Table 1 – Year-on-year market data spend for a hypothetical EU principal trading firm

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	86,016	86,016	89,984	89,984	**5%**
Borsa Italiana	120,080	125,342	125,342	125,680	**5%**
Cboe Europe	31,483	44,760	45,303	49,085	**56%**
Deutsche Borse	61,878	82,591	152,136	173,526	**180%**
Euronext	68,280	72,180	108,810	111,751	**64%**
ICE Europe	144,303	139,754	159,581	158,664	**10%**
Irish Stock Exchange	9,734	9,984	47,280	17,562	**80%**
London Stock Exchange	72,674	80,607	83,978	98,681	**36%**
Nasdaq Nordic	80,440	81,120	81,120	81,120	**1%**
Oslo Bors	6,228	6,252	6,686	7,760	**25%**

SIX Swiss Exchange	78,044	81,067	78,029	79,623	**2%**
Turquoise	19,842	18,547	18,379	20,202	**2%**
Warsaw Stock Exchange	112,064	117,209	119,883	119,971	**7%**
Wiener Borse	26,220	26,220	30,840	32,100	**22%**
Grand Total	**917,287**	**971,650**	**1,147,351**	**1,165,710**	**27%**

In the 2016-19 period a number of technical and structural changes at different exchange groups specifically impacted certain fee categories. Notably, in the period Euronext launched its new Optiq Market Data gateway during 2017. While, also in 2017, Deutsche Boerse launched the new Xetra Order by Order product. Furthermore, in 2019, Euronext completed its acquisition of the Irish Stock Exchange.

The data set can be further broken down to look at the relative impacts across different types of usage as well as by asset class, as per Tables 2-4 below:

Table 2 – Year-on-year market data spend linked to equities trading

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	66,576	66,576	68,760	68,760	**3%**
Borsa Italiana	65,830	71,092	71,092	71,430	**9%**
Cboe Europe	31,483	44,760	45,303	49,085	**56%**
Deutsche Borse	30,678	51,391	108,000	114,720	**274%**
Euronext	55,200	58,080	66,600	70,097	**27%**
Irish Stock Exchange	9,734	9,984	47,280	17,562	**80%**
London Stock Exchange	72,674	80,607	83,978	98,681	**36%**
Nasdaq Nordic	63,880	64,160	58,560	58,560	**-8%**
Oslo Bors	6,228	6,252	6,686	7,760	**25%**
SIX Swiss Exchange	78,044	81,067	78,029	79,623	**2%**
Turquoise	19,842	18,547	18,379	20,202	**2%**
Warsaw Stock Exchange	112,064	117,209	119,883	119,971	**7%**
Wiener Borse	26,220	26,220	30,840	32,100	**22%**
Grand Total	**638,454**	**695,946**	**803,390**	**808,552**	**27%**

Table 3 – Year-on-year market data spend linked to derivatives trading

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	19,440	19,440	21,224	21,224	**9%**
Borsa Italiana	59,530	59,752	59,752	59,860	**1%**
Deutsche Borse	31,200	31,200	44,136	56,847	**82%**
Euronext	13,080	14,100	42,210	41,654	**218%**
ICE Europe	144,303	139,754	159,581	158,664	**10%**
Nasdaq Nordic	23,560	23,360	29,760	29,760	**26%**
Warsaw Stock Exchange	20,389	23,246	26,019	26,912	**32%**
Grand Total	**311,502**	**310,852**	**382,682**	**394,921**	**27%**

In some cases, it is not possibly to easily split fees on certain venues by asset class. These fees have been labelled as "Mixed" in the underlying Excel data and the value of these fees (€39,722 in 2019) is included in both Tables 2 and 3.

Table 4a – Year-on-year market data spend (display usage)

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	9,360	9,360	11,820	11,820	**26%**
Borsa Italiana	5,280	5,502	5,502	5,610	**6%**
Cboe Europe	7,322	7,118	7,324	7,721	**5%**
Deutsche Borse	18,410	19,620	20,736	23,084	**25%**
Euronext	17,760	16,440	17,400	17,562	**-1%**
ICE Europe	28,678	27,774	31,714	32,324	**13%**
Irish Stock Exchange	2,246	2,496	3,480	2,442	**9%**
London Stock Exchange	24,601	23,961	25,470	28,645	**16%**
Nasdaq Nordic	13,440	13,920	13,920	13,920	**4%**
Oslo Bors	3,849	3,963	4,414	4,470	**16%**
SIX Swiss Exchange	9,246	13,601	13,091	13,359	**44%**
Turquoise	1,538	1,437	1,424	1,562	**2%**
Warsaw Stock Exchange	4,345	4,454	4,900	5,974	**37%**
Wiener Borse	4,920	4,920	5,520	5,580	**13%**
Grand Total	**150,996**	**154,566**	**166,716**	**174,074**	**15%**

Table 4b – Year-on-year market data spend (non-display trading usage)

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	14,040	14,040	14,760	14,760	**5%**
Borsa Italiana	108,500	108,500	108,500	108,500	**0%**
Cboe Europe	24,162	37,642	37,979	41,364	**71%**
Deutsche Borse	43,468	62,971	82,200	92,899	**114%**
Euronext	33,120	33,120	64,620	66,209	**100%**
ICE Europe	72,347	70,066	80,007	79,435	**10%**
Irish Stock Exchange	7,488	7,488	28,800	9,450	**26%**
London Stock Exchange	35,462	34,540	36,603	47,324	**33%**
Nasdaq Nordic	60,000	60,000	60,000	60,000	**0%**
Oslo Bors	2,379	2,289	2,272	3,290	**38%**
SIX Swiss Exchange	68,797	67,466	64,937	66,264	**-4%**
Turquoise	18,304	17,110	16,955	18,640	**2%**
Warsaw Stock Exchange	103,135	108,057	109,117	108,180	**5%**
Wiener Borse	14,400	14,400	15,600	16,800	**17%**
Grand Total	**605,602**	**637,690**	**722,349**	**733,116**	**21%**

Table 4c – Year-on-year market data spend (non-display other usage – includes risk/compliance and other non-trading usage)

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	5,616	5,616	5,904	5,904	**5%**
Borsa Italiana	6,300	11,340	11,340	11,570	**84%**
Deutsche Borse	0	0	49,200	55,584	**-**
Euronext	17,400	22,620	26,790	27,980	**61%**
ICE Europe	17,207	16,664	19,029	19,395	**13%**
Irish Stock Exchange	0	0	15,000	5,670	**-**
London Stock Exchange	12,612	22,106	21,905	22,712	**80%**
Warsaw Stock Exchange	4,584	4,698	5,866	5,816	**27%**
Grand Total	**63,718**	**83,045**	**155,035**	**154,631**	**143%**

Table 4d – Year-on-year market data spend (administrative and internal distribution)

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	57,000	57,000	57,500	57,500	**1%**
ICE Europe	26,071	25,249	28,831	27,510	**6%**
Nasdaq Nordic	7,000	6,800	7,200	7,200	**3%**
Wiener Borse	6,900	6,900	9,720	9,720	**41%**
Grand Total	**96,971**	**95,949**	**103,251**	**101,930**	**5%**

As the tables above highlight, once one drills into the detail below the top-line increase for the hypothetical firm, there is a wide variation in both the absolute costs across EU venues and the year-on-year percentage changes. Notably, the display user costs increase on a relatively modest basis in percentage terms and have a relative low absolute cost in our model firm given the relatively low number of display users. Non-display usage accounts for the bulk of the absolute spend for our model firm and shows a larger percentage increase when compared with display use. As further explained in our response to Question 3 the largest percentage increase in costs over the period arose from non-trading uses for non-display data. The contribution here comes from a mixture of relatively large percentage increases on certain trading venues alongside other venues adding this as a new explicit pricing category from 2018.

One of the major market structure changes arising from the implementation of MiFID 2 was the broad increase in the number of EU investment firms registering and operating systematic internalisers (SIs) in EU equities. As further set out in our response to Question 3, if our hypothetical principal trading firm had registered as an SI at the start of 2018 it would have seen a more significant increase of ~ 83% in overall costs.

Table 5 – Year-on-year total market data spend including market data cost linked to operating an SI in EU equities from 2018.

	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Grand Total	**917,287**	**971,250**	**1,447,526**	**1,682,273**	83%

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

As explained above under our response to Question 1, we are indeed observing price increases but are unsure as to the reasons for these increases. However, we do not believe, with one or two exceptions, that exchange feeds have undergone major transformations in the past four years.

FIA EPTA is unclear about the relationship between actual exchange costs for producing and disseminating market data and the fees charged to users. Given the shifting demographics of the exchanges' user base (away from screen-based point-and-click trading to algorithmic trading), we would contend that exchanges have started to adopt "value-based" pricing models.

Over the past 15 years, FIA EPTA has witnessed two major phases of exchange evolution — (i) the transition from privately held companies largely mutually owned by exchange members to public companies, followed (ii) by a period of consolidation to create large regional and global exchange groups. As most exchanges have become publicly listed, there is pressure to provide investors with continual revenue growth. Both research analysts and shareholders typically attach much higher multiples to predictable subscription revenue streams over potentially volatile trading fees and, in particular, will actively compare individual public companies with their peers. We believe that this context may have directly or indirectly led to exchanges focusing on ways to increase their subscriber revenues, and accordingly, the pressures of being a publicly traded company may have been a contributing cause of market data fee increases.

Likewise, FIA EPTA observes that exchanges have had a tendency to converge their commercial offerings in such areas as execution pricing, market microstructure development, and market data products. For example, in the early 2000s two exchanges pioneered the concept of non-display pricing within their market data policies and price schedules. Following the success for these exchanges in implementing these changes charging for non-display usage rapidly became the norm across all major exchanges in the US, Europe and beyond. More recently, and as shown in our response to Question 1 and expanded further in our response to Question 3, the concept of applying additional charges for what we refer to in our model as "Non-display other" usage (intended to capture risk, quantitative analysis, and other non-trading use cases), is gradually becoming more widespread with a further two exchanges adding this to their market data schedules as of 2018.

Similarly, upon the emergence of significantly more SIs as an effect of MiFID II, most exchanges further amended their market data schedules to capture additional revenues from this market structure change.

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)?

A general observation over the past 15 years is that exchanges have consistently added additional usage categories to their market data schedules, and as noted above, once one or two venues successfully pioneer a new approach, it is often rapidly adopted across the industry and becomes the new status quo. Often end-users of market data do not have any other option than to accept these new charges given the lack of viable alternative sources to obtain this critical input that guides both trading and risk management practices.

Looking at MiFID II specifically, the two most significant fee categories adopted were (1) those relating to the use of market data for risk/compliance and other non-trading purposes and (2) those related to systematic internalisation.

Ad (1): Prior to MiFID II, only a handful of exchange groups applied explicit fee categories for risk and other usage. MiFID II (Article 17(7) and subsequently RTS 6) introduced new and granular regulatory obligations on investment firms, with respect to real-time risk and compliance controls. In the period leading up to the implementation of MiFID II, and as shown in Table 4c (repeated below), EU trading venues often significantly increased these fees (on a percentage basis) or adopted the practice of explicitly charging for such use for the first time. As highlighted in our response to Question 1, this practice resulted in the largest percentage fee increase looking across the 2016-19 period.

Table 4c – Year-on-year market data spend (non-display other usage – includes risk/compliance and other non-trading usage)

Exchange	Sum of 2016 Total in EUR	Sum of 2017 Total in EUR	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR	% Change 2016-19
Bolsas y Mercado Espanoles	5,616	5,616	5,904	5,904	**5%**
Borsa Italiana	6,300	11,340	11,340	11,570	**84%**
Deutsche Borse	0	0	49,200	55,584	**-**
Euronext	17,400	22,620	26,790	27,980	**61%**
ICE Europe	17,207	16,664	19,029	19,395	**13%**
Irish Stock Exchange	0	0	15,000	5,670	**-**
London Stock Exchange	12,612	22,106	21,905	22,712	**80%**
Warsaw Stock Exchange	4,584	4,698	5,866	5,816	**27%**
Grand Total	**63,718**	**83,045**	**155,035**	**154,631**	**143%**

It is worth noting that both ICE Futures Europe and Bolsas y Mercado Españoles (BME) charge for non-display usage on a per-server model whereas the other venues listed here (and in Table 4b) charge flat fees for unlimited non-display usage within their defined categories.

Ad (2): As has been discussed at length both by industry and policymakers, the MiFID II legislation prompted both investment banks and principal trading firms to operate their own SIs. At the same time, most exchanges introduced new fee categories or amended existing premium fee tiers to cover the use of their market data to operate an SI. As shown in Table 6 below, in 2019 our hypothetical firm, if operating an SI, would have incurred costs of €519k for this category alone.

Table 6 – Year-on-year market data costs associated with operating an SI in European equities

Exchange	Sum of 2018 Total in EUR	Sum of 2019 Total in EUR
Bolsas y Mercado Espanoles	126,000	76,000
Borsa Italiana	0	65,100
Deutsche Borse	30,000	32,100
Euronext	48,000	48,782
Irish Stock Exchange	7,200	18,293
London Stock Exchange	36,603	94,649
Nasdaq Nordic	42,000	42,000
Oslo Bors	1,714	2,481
SIX Swiss Exchange	8,658	8,835
Warsaw Stock Exchange	0	130,281
Grand Total	**300,175**	**518,522**

Some FIA EPTA members that operate SIs[1] feel that the fees for SI-related use are exorbitantly high and do not reflect any significant changes in the feeds (dissemination, protocol, or otherwise). Such members perceive the high fees charged or ultimately applicable to SI business models as a way for exchanges to unfairly increase the cost of doing business by potential competitors, an issue such members feel would benefit from review by competent authorities. Such members note that while most SIs opted into the regime on a voluntary basis, MiFIR also introduces thresholds where firms operating significant off-exchange trading businesses are required to register as an SI. SIsare also required to maintain their quotes closely in line with the most relevant market (which is often the primary market).

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.

FIA EPTA members have uniformly observed increasing complexity of market data policies and agreements. Agreements that originally were short and succinct texts are now often packages of multiple lengthy documents (consisting i.a. of the agreement itself, fee schedules, redistribution agreements, policy guides, order forms, usage declarations, audit procedures, etc.) and require review by multiple internal stakeholders (e.g., market data, legal, compliance, and potentially even technology specialists) before sign-off. Some exchange agreements, policies and fee schedules exceed seventy-five pages. Likewise, the frequency of revisions to these documents has increased dramatically, sometimes changing every six months.

The documentation is often so complex that even the market data teams at individual trading venues do not fully understand the agreements and schedules and are not always able to adequately explain how usage should be categorised and reported when they are queried by customers. This ever-growing complexity has resulted in some firms needing to increase headcount by hiring dedicated market data specialists, focused on reviewing and interpreting market data policies and fulfilling subsequent reporting obligations.

As a result, exchange audits have also become a significant issue. While MiFID II has called for exchange costs to be predictable, FIA EPTA members have rather experienced increasingly complex policies and increased audit scrutiny. FIA EPTA believes that market data policies are now so complex that even the most sophisticated end-users struggle to fully interpret their obligations. This creates a significant compliance burden, and FIA EPTA members consider that the regulatory expectations of MiFID II have not been realised in this respect.

By way of example, although the majority of exchanges on principle now offer 'native user pricing' (i.e. charging on a 'per-user basis' to avoid data users being charged more than once for the same market data use). In practice, it has proven to be very difficult for firms to be accepted onto that pricing structure: it involves a convoluted and uncertain process which requires considerable time, effort and manpower from firms, while at no stage firms have assurance that acceptance will be granted by the trading venue. Typically, trading venues require an audit to be conducted of the firm's last 3-5 years of market data usage and then additionally venues will apply a three-month acceptance period. Some of our members have experienced the audit process for certain exchanges to take up to 18 months to complete, and one exchange has yet to accept any firms into its native user pricing structure. It should also be noted that some exchanges have introduced premium fees for users who would like to utilise such pricing, which FIA EPTA believe contradicts the spirit of MiFID II.

[1] Note: 11 out of 28 FIA EPTA members have registered as SIs since the inception of MiFID II: https://registers.esma.europa.eu/publication/searchRegister?core=esma_registers_upreg

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 agree that the current disclosure requirements are not being fully complied with. As ESMA indicates, a significant number of trading venues and APAs are not publishing any of the required information, and others are not providing key data, such as (a) revenues from market data and (b) specific information detailing how the price for market data was established. Additionally, reporting dates and coverage periods vary significantly (from 2016 through to 2018) and we believe would benefit from ESMA guidance to standardise the approach to disclosure. We urge ESMA to recommend that this topic merits enforcement priority by NCAs.

We also note that the disclosure requirements do not apply to trading venues and APAs that make market data available to the public free of charge. MiFID II requires that certain pre-trade and post-trade data be provided to the public free of charge. Compliance with that requirement should not exempt trading venues and APAs from providing the necessary disclosure to market participants regarding market data that is available for a fee. We urge ESMA to clarify the scope of this exemption such that it is not used to undermine the level of information provided to market participants and to recommend legislative changes to the extent necessary.

Finally, we note that for non-equity derivatives, the current interpretation of the concept "traded on a trading venue" has significantly limited the amount of transparency data required to be published by SIs. This is because nearly all off-venue derivatives transactions are being considered out-of-scope of the MiFID II transparency regime. Until this is fixed, it is difficult to assess SI compliance with the disclosure requirements.

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.
FIA EPTA agrees that the lack of a uniform format for disclosures makes it extremely difficult to compare across trading venues and APAs. Greater standardisation by trading venues and APAs would be appreciated in this regard, along with active enforcement to ensure that the required information is indeed disclosed in the appropriate format and manner.

In addition, FIA EPTA would highlight the relative lack of granularity and detail provided by trading venues and APAs in their RCB disclosures, particularly when compared to the length, complexity and detail included within the underlying market data policies, agreements and pricing schedules. We note a striking asymmetry, where a relatively high-level RCB disclosure of only a few pages sits alongside over 50 pages of dense legal and technical text for these other documents.

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

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

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?
FIA EPTA believes that the near-term goal should be to achieve a significant improvement in cost transparency. Once there is clarity on cost, then an appropriate model can be chosen. In respect of a revenue cap specifically, FIA EPTA members believe that without improvements to transparency on the current costs and margins on market data, it would be extremely difficult to calibrate a revenue cap model. In addition, such a model may lead to unintended consequences such as pressure from shareholders on venues and vendors who are operating below the cap to increase revenues up to the capped level, resulting in an overall increase in fees. In addition, venues or vendors may look to increase their margins on unregulated revenue streams elsewhere in their business to offset the loss of revenue on market data potentially resulting in higher overall costs for end-users.

FIA EPTA believes that most exchanges try to find a balance between fees for trading and market data. However, demand for market data is relatively static, whereas as firms seek best execution, they have more flexibility in where to trade. Therefore, high market data fees ultimately act as a tax on efficiency.

Q10: Did data disaggregation result in lower costs for market data for data users? If not, please explain why?
FIA EPTA has not seen data disaggregation result in lower market data costs for its data users. However, we would note that the trading profile of most FIA EPTA members is such that they are often subscribing to very broad sets of products on each trading venue; therefore, members did not expect to see material benefits arising from data disaggregation.

FIA EPTA members would like to highlight their support for aggregated products covering more than one asset class or multiple trading venues within an exchange group. These are often the most cost effective way for larger users to access market data on certain venues. We have observed one instance of an aggregate product being removed from a primary market's pricing schedule in 2019, forcing users to instead subscribe to two disaggregated products at a higher overall cost. We would encourage regulators and policy makers to continue to support these aggregated packages while at the same time ensuring that smaller users with more tailored market data needs are well served through appropriately priced disaggregated products.

Q11: Why has there been only little demand in disaggregated data?
As indicated above, this is not an area in which FIA EPTA members expected to see benefits following the implementation of MiFID II. As such, we cannot provide meaningful feedback on this point.

Q12: Do trading venues and APAs comply with the requirement to make available data free of charge 15 minutes after publication? If not, please explain in which areas you have identified deficiencies
No, many trading venues and APAs are still not complying with the requirement to make transparency data available free of charge 15 minutes after publication. FIA EPTA members believe this is particularly problematic in the case of non-equities products, where we find that the lack of transparency information and the difficulty in accessing which information is available hurts competition and acts as a barrier for entry to new participants in these markets.

In particular:

- Certain trading venues and APAs still do not provide any data free of charge.

- Certain trading venues and APAs are not publishing data free of charge in a format that can be easily read, used and copied and that is machine-readable. For example, one APA, widely used for fixed income and derivative trades continues to publish pre-trade data as an image file that cannot be copied and now publishes post-trade data in 2-minute slice files that are not machine-readable. As a result, users have to manually open each 2-minute slice file in order to access the published data. This directly conflicts with the ESMA supervisory guidance, which states that "Trading venues, APAs and CTPs should publish information in an electronic format that can be directly and automatically read by a computer, and that can be accessed, read, used and copied by any potential user through computer software that is free of charge and publicly available."[2] Other examples include 'publishing' data by flashing it for a very short period of time on a website, or printing data every couple of minutes and deleting it subsequently after a period of time, in both cases only to be captured and used by taking screen grabs or automated crawlers, and subsequently piecing the data together, thus severely limiting usability of the data by firms. Almost all APA offer usable, machine-readable data, for a significant fee.

- Certain trading venues and APAs prohibit (through terms of use) any copying or redistribution of the data provided free of charge, even if these redistributors/third parties are providing services free of charge. This directly conflicts with the ESMA supervisory guidance, which states that "Trading venues, APAs and CTPs may not impose redistribution fees or other similar restrictions on redistributors/third parties making available data free of charge 15 minutes after the initial publication."[3]

- Certain trading venues and APAs continue to provide "premium" access to market data for a fee where data is published in a different and more user-friendly format. This directly conflicts with the ESMA supervisory guidance, which states that "the data made available free of charge *should be published in a similar format as real-time data published on a reasonable commercial basis*."[4]

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.
First of all, we consider it essential that the MiFID II legislative requirements and the existing supervisory guidance are complied with by trading venues and APAs and are enforced by NCAs. The regulatory expectations are clear and should be put into practice. Suggestions that these regulatory requirements only apply to retail investors or that any use of the market data is a value-added service are completely unsupported. Moreover, as detailed above under Q12, trading venues and APAs continue to invest significant efforts in designing methods for publishing data that make the data unusable in practice

[2] ESMA Questions and Answers on MiFID II and MiFIR transparency topics – Answer to Q10 (last updated 14/11/2018), available at: https://www.esma.europa.eu/sites/default/files/library/esma70-872942901-35_qas_transparency_issues.pdf
[3] ESMA Questions and Answers on MiFID II and MiFIR transparency topics – Answer to Q9 (last updated 15/11/2017), available at: https://www.esma.europa.eu/sites/default/files/library/esma70-872942901-35_qas_transparency_issues.pdf
[4] ESMA Questions and Answers on MiFID II and MiFIR transparency topics – Answer to Q10 (last updated 14/11/2018), available at: https://www.esma.europa.eu/sites/default/files/library/esma70-872942901-35_qas_transparency_issues.pdf

and directly violate existing regulatory requirements. However, given this low level of compliance with the existing rulebook, FIA EPTA agrees that further regulatory and supervisory actions are necessary.

In that regard, we would encourage greater transparency around enforcement of the existing requirements as we believe that additional transparency would aid the consistent adoption of the current regulatory requirements. Additionally, FIA EPTA strongly urges ESMA to clearly define requirements regarding the consistent formatting of data (that can actually be machine-read), as well as regarding appropriate delivery mechanisms (both in terms of streaming and downloading/FTP end-of-day), for a reasonable period of time and at no cost.

Such improvements are essential, we believe, in particular for bringing greater transparency to non-equities markets which otherwise remain opaque. If the current situation were to persist, the available data will continue to be of limited use. This is detrimental to the wider market and only benefiting a limited number of incumbents.

While, as a first step, we would welcome additional or updated ESMA guidance/Q&As on the above issues, we would strongly favour these to be embedded in comprehensive Level 2 RTS that are directly applicable and enforcable (enabled by Level 1 amendments to MiFID II, if necessary). We would welcome for ESMA to recommend such a course to the European Commission.

In parallel, we also strongly suggest ESMA to consider recommending to the European Commission a Level 1 change to MiFID II that would prohibit trading venues and APAs from charging for regulatorily-required post-trade data at all, as this would remove the commercial incentive to make the freely available data unusable in practice.

Consolidated Tape:

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?
FIA EPTA agrees that there has been, to date, no consolidated tape provider (CTP), despite the MiFID II provisions catering for its creation, because the cost has been perceived as too high without adequate financial incentives. However, we believe this can be addressed by clarifying that trading venues and APAs must mandatorily contribute post-trade data to the CTP at no charge. We detail our reasoning below.

<u>Assumption 1: Trading venues and APAs will charge the CTP for the provision of post-trade data</u>
ESMA assumes in section 4.2.1 that a CTP would face challenges putting a business case together to consolidate all post-trade data on equity instruments as, in the majority of cases, trading venues and APAs will ask for a fee for the provision of such data.

However, this does not have to be the case, and indeed, FIA EPTA believes in order to facilitate the viability of a CTP, it should be clarified that trading venues and APAs must mandatorily contribute post-trade data at no charge.

<u>Assumption 2: Significant demand for real-time consolidated data unlikely due to high fees</u>
In the same section, paragraph 116, ESMA assumes it is unlikely there will ever be significant demand for real-time consolidated data in view of the high fees a CTP would have to charge in order to recover its expenses.

However, if Assumption 1 no longer holds true, FIA EPTA considers Assumption 2 can be challenged as well. When trading venues and APAs are required to contribute post-trade data to the CTP free of charge, the CTP has a lower expense base to recover by means of fees charged to users. This makes the business case for a CTP much more viable and increases the chances of achieving the goal that the consolidated tape can serve as a transparency tool at an affordable price for ordinary investors.

Assumption 3: A CTP will struggle to compete with real-time data products from trading venues/APAs
ESMA points out that because the CTP will experience inevitable latency in collecting and consolidating data from multiple sources, it will always compete with (and may lose out to) real-time data feeds provided directly from trading venues. FIA EPTA does not believe these two things are in competition as we believe the CTP has a very different use case from real-time direct data feeds.

A post-trade CT would provide significant added value to the market by providing a high-quality consolidated view regarding the venues, volumes and prices at which equities or other instruments were traded. Nevertheless, we envision a CT will first and foremost be used for evaluation of post-trade best execution. Other use cases may include benchmarking, portfolio construction, market abuse monitoring, accurate sizing of market in each security, valuation and accurately determining addressable liquidity.

For trade execution, pre-trade market data has more merit than a post-trade tape. We, therefore, do not view a post-trade CT to be in competition with the direct data products provided by exchanges; rather, a CT would be complementary to such. Professional investing market participants and intermediaries, in particular those that are latency sensitive, will continue to require low-latency, real-time pre-trade data.

However, even a post-trade CT will add value to participants in making informed business decisions with respect to execution, in particular for non-professional investors, provided it is as close to real-time as possible.

Assumption 4: Non-regulated entities have a significant competitive advantage over a potential CTP
Because the activity of providing consolidated information on the market is not mandated to be regulated, other entities could provide the same service and not be subject to the authorisation process and ongoing supervision as a CTP would, nor the requirements to provide the CT on a reasonable commercial basis (RCB) and free of charge after 15 minutes.

Indeed, FIA EPTA agrees that certain existing data vendors, e.g. Bloomberg, already have products that look like the consolidated tape. However, we would caution that these products are cost prohibitive for many participants in the market due to the high aggregate cost of data.

If Assumption 1 no longer holds true, Assumption 4 can be challenged as well: while we do not see the CTP as a pure public utility, we do believe it is appropriate that the CTP can and should have a different cost base than purely commercial data vendors – i.e. trading venues and APAs will be required to submit real-time post-trade data to the CTP. This should enable the CT to be accessible from a cost perspective for the majority of market participants.

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.
FIA EPTA believes an additional element that has hindered the establishment of an equity CT is the complexity of exchange market data contracts. In establishing a CTP, we believe a more efficient model would be to harmonise a standard contract form and require input contributors to contract with a central CTP administrator, rather than requiring multiple, bilateral contracts with individual venues/APAs.

Q16: Please explain what CTP would best meet the needs of users and the market?
FIA EPTA believes a CT should be a real-time, post-trade tape that democratises the latency of market data and allows small investors to have low-cost access to comparable information as large investors. This should contribute to creating a more integrated European market, ensuring that consistent and accurate data is made available to market participants, and allowing investors to obtain a full picture of the trading volumes of a product listed across multiple exchanges. A consolidated tape should help to stitch together Europe's fragmented equities market landscape and help more ETFs in Europe to be traded on exchanges.

We believe a CT will be a tool for investors and professionals alike to monitor executions and transaction costs. We see it being used primarily for best execution, transaction cost, and portfolio composition analysis as well as for regulatory compliance, but we do not underestimate the importance of properly sequenced, last traded price information for trading purposes. In this sense, we believe the post-trade CT may have value for informing pre-trade routing decisions for some investors.

We believe the CTP should begin with equities coverage, given the relative better quality of data, but should ultimately encompass other asset classes like bonds and OTC derivatives. An alternative is to allow different firms to start work on separate CTPs per asset class simultaneously, as the CTPs for non-equities and equities will likely be somewhat different in format anyway.

To provide a complete picture of liquidity across the fragmented European market landscape, it should absolutely capture SI and OTC activity. Even non-price forming trades should be included, provided they are flagged properly.

The CT should not be mandatory to consume (like in the US), nor should we introduce a protected quote rule in the EU.

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.
FIA EPTA agrees that post-trade data is available from trading venues and APAs. While trades are reported, however, they are reported to different places, in different formats, making it difficult to assess the true liquidity. In particular, APA data quality is far from consistent, and delivery mechanisms are disparate and not easily machine-readable. The aggregate cost of all of these fragmented offerings is also extremely high. In this regard, we also make reference to our response to Questions 12 and 13 above.

Q18: Do you agree that post-trade data is provided on a timely basis and meets the requirements set out in MiFID II/MiFIR and in the level 2 provisions? If not, please explain.
As above, FIA EPTA believes the current challenge lies with the inconsistency of data quality and disparate delivery mechanisms (such as flashing information on websites) that make it difficult for market participants to actually use the post-trade data. In this regard, we also make reference to our response to Questions 12 and 13 above.

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?
FIA EPTA agrees with ESMA that a first and indispensable step is to ensure a high degree of data quality and the use of the same, or at least easily comparable data standards, across trading venues and APAs. However, we would not let "better" be the enemy of "good" and would recommend starting on a CTP as soon as possible, using its existence to further leverage and enforce data quality improvements.

Q20: Do you agree that the observed deficiencies make it challenging to consolidate data in a real-time data feed? If yes, how could those deficiencies best be tackled in your view?
Currently, given that not all trading venues use a common standard, brokers have no standard to use which makes it more difficult to compare data. This is reflected in the lack of consistency between broker reports. A harmonised standard, such as the Market Model Typology (MMT), that would be enforced would be helpful. The long-term benefit would be worth the one-off cost for change (in particular IT cost). Moreover, it would improve data exchange in the future and thus reduce recurring costs.

However, we would not let "better" be the enemy of "good" and would recommend starting on a CTP as soon as possible, using its existence to further leverage and enforce data quality improvements. As noted by ESMA, data vendors already have demonstrated that post-trade data can be successfully consolidated.

Industry standard: FIA EPTA believes one way in which to tackle these deficiencies would be to make compulsory the use of the MMT industry standard. MMT is an industry initiative that is overseen by the FIX Trading Community and adopted by trading venues such as exchanges and SIs. Almost all exchanges contributed to the development of MMT, and it was developed by market data experts. MMT helps to pass the same information in the same format down the line to improve the visibility of data based on clear implementation documentation. It has been optimised for and is compatible with MiFID II RTS1 and RTS2, and the fact that there has been no need for change since MiFID II was introduced attests to its stability. It is already applied by almost all major European stock exchanges.

One drawback may be that MMT is perceived as equity focused and not as generally adopted in fixed income. However, as above, we recommend the CTP look to the better data quality of equities as a way forward as the CT extends to additional asset classes.

Responsibility: The quality of reference data (FITRS and FIRDS databases) also requires attention. In particular, errors in these databases, if unaddressed, feed through into further uses of the data. Another key way to tackle data deficiencies is to clarify who in the market is end-responsible for data quality. In this regard, we believe ESMA is best placed for the overall oversight of data quality. Currently, responsibility appears to reside with market participants.

Enforcement: Finally, enforcement is another critical tool for obtaining data quality. Adapting IT systems may not be a priority for smaller market participants, but it should not be cheaper to pay a fine for not fulfilling the legal requirements on data than it is to comply. Likewise, we understand that, while quality is improving, the overall data quality of APAs is sub-par compared to exchanges. This is one reason we believe APA data is currently less in demand, as there is no guarantee regarding the overall data quality.

One reason for the inferior data quality is attributed to a lack of enforcement. Guidance by ESMA on appropriate flags would therefore be welcomed. Furthermore, FIA EPTA believes ESMA is the most appropriate body to supervise overall data quality, including mandating the use of MMT. The mandate should be complemented with proper standards on how to implement MMT to limit room for interpretation. In order to ensure a level playing field and the consistent application of the relevant rules across the Union, we believe ESMA should be charged with the supervision and enforcement of trade reporting and should carry out regular audits of trading venues and APAs.

Data quality should be safeguarded throughout the chain of transmission, with accountability at all levels (venue, APA, CTP). Situated at the end of the chain, a CTP would have no way to check and correct data that is handed to it. In this way, we believe we need cascading enforcement of standards:

with overall responsibility vested in ESMA, and APAs, in turn, controlling and enforcing the data quality of SIs and OTC reporters.

Q21: What are the risks of not having a CTP and the benefits of having one?
FIA EPTA agrees with ESMA that a CTP would provide consolidated post-trade data in a timely manner; invest in improving data quality; and make it viable to use post-trade data to view the liquidity landscape for the same (type of) instrument traded across fragmented venues. While not every principal trading firm or other market participant would be interested to use such service to the same extent (or at all), the CT would bring best execution closer to investors: they can verify and monitor this better by having access to an effective CT.

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

In fact, a well-functioning, high-quality CT would act as a catalyst for further integration of European capital markets and the realisation of an EU Capital Markets Union (CMU). We believe a CT will stitch together Europe's fragmented equities market landscape and promote on-venue trading, particularly in ETPs not subject to the trading obligation. As such, a CT will benefit financial markets as a whole, including retail investors who (directly or indirectly) will have access to better prices and increased transparency. It's possible a CT would also help to counteract the growing European trend of volume consolidating at market close or in the end-of-day auction, by reinforcing the public's confidence in intraday prices.

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

A final point, noting a recent exchange outage that resulted in postponed opening of shares trading, is that outages on primary European markets tend to all-but halt trading activity also on other venues like MTFs. We understand that this is in part because the EU does not have a consolidated tape to provide market participants with market-wide price data. As the same dynamic is not present in the case of exchange outages in the US, it may be because there the consolidated tape gives market participants more confidence in real-time prices in order to continue trading.

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.
FIA EPTA would support adopting the industry-led initiative on data quality (MMT); however we believe there is still a need for guidance from ESMA on appropriate flagging. We would also strongly support choosing ESMA to be the body end-responsible for overall data quality in Europe. Please see our above answer to Q20 for further detail.

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?
FIA EPTA believes it is important, for the CT to achieve a complete picture of Europe's fragmented liquidity, for the CT to include *all* trade-related information. Nothing should be left out – rather, we should allow market participants to filter what information they find useful.

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

Furthermore, as certain securities and ETFs can be listed on multiple exchanges and sometimes in different currencies at each exchange, rather than face the complexity (and latency implications) of converting these currencies, we believe the CT can be just as effective by providing a single stream for the same ISIN with the currency specifically called out. The CTP should not be required to pinpoint a conversion rate into Euro.

Finally, the data flowing to the CTP should be submitted on a need-to-know basis only. The objective would be to have a consolidated tape of transactions, for the verification of best execution and similar purposes. It should be noted that not all data that participants submit to APAs is needed for realising that objective. Notably, data that exceeds what eventually ends up in the CT, or data enabling any third parties to reconstruct the trading behaviour of other participants, are not relevant for the purposes of the CT and should, therefore, be excluded from the feeds accessible to the CTP. This is to ensure that the CTP or other market participants will not be able to piece fragmented APA data together so as to reverse-engineer firms' trading strategies and/or derive other highly sensitive information from the CTP's unique position. Additionally, the CTP should not be allowed to develop any derived commercial products (other than the CT itself) on the basis of the data feeds it receives.

Q24: Do you agree that the mandatory contribution from trading venues and APAs to a CTP would favour the establishment of CT?
Yes, FIA EPTA strongly agrees. Please see also our answer to Q14.

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.
FIA EPTA believes mandatory contribution of data to the CTP is the simplest and cleanest structure to make a CT viable. Regarding setting forth criteria to determine the price that CTPs should pay to TVs and APAs for data, we believe this route is at risk of entanglement in the same issues that have complicated the determination of what RCB should be with respect to the cost of market data from trading venues.

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

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

Q28: Do you consider it necessary that the CT covers all trading venues and APAs and the whole scope of equity instruments or would you be supportive of limiting the coverage of the CT? Please provide reasons for your preference and explain your preferred approach.

FIA EPTA believes 100% coverage is vital, as otherwise the added value of the tape would be limited and information would still be fragmented, as currently is the case. Moreover, with respect to equity-like instruments, it is already a legal requirement. The tape would also be relevant as a reference for non-liquid instruments.

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

Beyond this, we also believe there is no reason why the CT cannot be real-time given the technological sophistication of the market as a whole and the low burden, from a technology perspective, of republishing trade events. To the extent any systems would need to be adapted to accommodate real-time reporting, we believe the cost of that investment is more than worthwhile to promote a cohesive view of liquidity across European markets accessible to all investors.

Q30: Are there any measures (either technical or regulatory) that can be taken in order to mitigate the latency impacts?
FIA EPTA members consider that in order to make the CT robust and usable as a real-time tape, all the possible deferrals and delayed reporting periods of MiFID II should be revisited and reduced.

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?
FIA EPTA believes, fundamentally, in competition to promote innovation and prevent monopolistic structures from developing. However, we believe the primary benefit of a CT is to overcome the fragmentation of European markets and therefore support a single, reliable source for a consolidated overview. We also acknowledge that requiring trading venues and APAs to contribute input data on a mandatory basis would be an operational burden if data had to be directed to more than one CTP. Limiting the operation of the CT to a single provider minimises this potential burden and increases the economic viability of the CTP business model, in addition to preserving a single, "golden source." We do, however, envision that different asset classes may be able to be operated by different CTPs.

Q32: Should the contract duration of an appointed CTP be limited? If yes, to how many years?
As noted above, FIA EPTA believes a single provider should operate the CT to have one reliable source, to minimise operational burden on contributors, and to concentrate subscribers and make the business model more attractive. We agree with ESMA that the presence of numerous CTPs would by definition diminish the number of users per CTP and result in a commercially less attractive opportunity for providers. Therefore, we believe ESMA should put out a tender based on a fixed contract period, which should be at least 3-5 years (provided all requirements continue to be met).

Regardless of contract duration, the top-level governance of any CTP remains critical. This should be required to include a diverse set of market stakeholders and avoid giving any group of (incumbent) stakeholders exclusive rights. This is the most important safeguard against the risks of monopoly or conflicts of interest.

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

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

FIA EPTA agrees with ESMA's proposed model for redistribution of revenues to contributing entities. We believe revenues should be allocated back to exchanges/APAs based on contribution to executed liquidity, weighted by value (e.g. price-forming trades weighted more heavily than trades executed under a waiver or in auction (lesser value to price formation)). Coupled with this should be seriously deterrent penalties on trading venues/APAs for incorrect or late data (with APAs, in turn, policing SIs and OTC reporters for their post-trade reporting).

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

Q35: How would Brexit impact the establishment of a CT? Would an EU27 CTP consolidating only EU27 transactions be of added value or would a CT that lacks UK data not be perceived as attractive?

As stated above, FIA EPTA believes a primary benefit of a consolidated tape is to overcome fragmentation. An EU27 CT would still be very valuable in this respect, but we would definitely prefer to see one consolidated source reflecting data from the EEA, UK and Switzerland.

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

Based on the proposed model for a CTP set out herein (with mandatory contribution by trading venues and APAs, and reasonable costs for users), FIA EPTA members do not envision any negative implications from an EU27 consolidated tape on European participants, as may otherwise be the case if the economics imposed significant costs on EU users.

Rather, provided our assumptions hold, we believe an EU27 CT (though preferably including UK and Swiss data) will create a more integrated European market, allow investors to obtain a full picture of the trading volumes of a product listed across multiple exchanges, and help more securities and ETFs in Europe to be traded on exchanges.

The existence of a EU27 CTP or an EU27 CTP including Swiss and UK data would contribute to the realisation of a European CMU and would promote a more vibrant and dynamic capital market. Should the EU commit to creating a CTP, we believe it would act as a "pull" factor, attracting more investors to participate on financial markets.