**Reply** **form: MiFIR Review**

RTS 2, RTS on reasonable commercial basis and RTS 23

|  |
| --- |
|  |

Responding to this paper

ESMA invites comments on all matters in the Consultation Paper and in particular on the specific questions in this reply form. Comments are most helpful if they:

* respond to the question stated;
* indicate the specific question to which the comment relates;
* contain a clear rationale; and
* describe any alternatives ESMA should consider.

ESMA will consider all comments received by **28 August 2024.**

Instructions

In order to facilitate analysis of responses to the Consultation Paper, respondents are requested to follow the below steps when preparing and submitting their response:

* Insert your responses to the questions in the Consultation Paper in this reply form.
* Please do not remove tags of the type <ESMA\_QUESTION\_CP1\_1>. Your response to each question has to be framed by the two tags corresponding to the question.
* If you do not wish to respond to a given question, please do not delete it but simply leave the text “TYPE YOUR TEXT HERE” between the tags.
* When you have drafted your responses, save the reply form according to the following convention: ESMA\_CP1\_nameofrespondent.

For example, for a respondent named ABCD, the reply form would be saved with the following name: ESMA\_CP1\_ABCD.

* Upload the Word reply form containing your responses to ESMA’s website (**pdf documents will not be considered except for annexes**). All contributions should be submitted online at [www.esma.europa.eu](http://www.esma.europa.eu) under the heading ‘Your input - Consultations’.

Publication of responses

All contributions received will be published following the close of the consultation, unless you request otherwise. Please clearly and prominently indicate in your submission any part you do not wish to be publicly disclosed. A standard confidentiality statement in an email message will not be treated as a request for non-disclosure. A confidential response may be requested from us in accordance with ESMA’s rules on access to documents. We may consult you if we receive such a request. Any decision we make not to disclose the response is reviewable by ESMA’s Board of Appeal and the European Ombudsman.

Data protection

Information on data protection can be found at [www.esma.europa.eu](http://www.esma.europa.eu) under the headings ‘Legal notice’ and heading ‘[Data protection](https://www.esma.europa.eu/about-esma/data-protection)’..

# General information about respondent

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

# Questions

**CP on the amendment of RTS 2**

1. Do you agree with the definition of CLOB trading systems proposed above? If not, please explain why.

<ESMA\_QUESTION\_CP1\_1>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_1>

1. Do you consider that the definition should include other trading systems? Please elaborate.

<ESMA\_QUESTION\_CP1\_2>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_2>

1. Do you agree that the description of periodic auction trading systems set out in Annex I of RTS 2 is relevant for specifying the characteristics of those trading systems in the revised RTS? If not, please elaborate.

<ESMA\_QUESTION\_CP1\_3>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_3>

1. Do you agree to use ESA 2010 to classify bond issuers If not, please explain and provide alternatives on how clarify how to classify sovereign, other public and corporate issuers.

<ESMA\_QUESTION\_CP1\_4>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_4>

1. Do you agree with the proposed LiS pre-trade thresholds for bonds? In your answer, please also consider the analysis provided in sections 4.2.1.

<ESMA\_QUESTION\_CP1\_5>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_5>

1. Do you agree with the proposed LiS pre-trade thresholds for SFPs and EUAs? In your answer, please also consider the analysis provided in section 4.2.2.

<ESMA\_QUESTION\_CP1\_6>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_6>

1. Do you agree with the approach taken for the illiquid waiver for bonds, SFPs and EUA? If you disagree with how the liquidity threshold is determined, please include your comments in Q11 for bonds, Q14 for SFPs and/or Q17 for EUAs.

<ESMA\_QUESTION\_CP1\_7>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_7>

1. Do you agree with the changes to post-trade fields summarised in Table 5? Please identify the proposal ID in your response.

<ESMA\_QUESTION\_CP1\_8>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_8>

1. Do you agree not to change the concept of “as close to real-time as technically possible”? If not, what would be in your view the maximum permissible delay?

<ESMA\_QUESTION\_CP1\_9>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_9>

1. Do you agree with the changes proposed for the purpose of the reporting of OTC transactions?

<ESMA\_QUESTION\_CP1\_10>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_10>

1. Do you agree with the liquidity thresholds set out in Table 7 above? If not, please provide an alternative approach.

<ESMA\_QUESTION\_CP1\_11>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_11>

1. Do you agree with the proposed thresholds specified in the above Tables? If not, please justify by providing qualitative data to your analysis and differentiating per asset class.

<ESMA\_QUESTION\_CP1\_12>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_12>

1. Do you agree with the maximum deferral period set out in the tables above?

<ESMA\_QUESTION\_CP1\_13>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_13>

1. Do you agree with a static determination of liquidity and determine that all SFPs are illiquid? If not, can you suggest any alternative methodology on how to define liquidity for SFPs?

<ESMA\_QUESTION\_CP1\_14>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_14>

1. Do you agree not to introduce changes to the threshold size currently applicable to SFPs as provided in RTS 2?

<ESMA\_QUESTION\_CP1\_15>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_15>

1. Do you agree with the maximum duration proposed?

<ESMA\_QUESTION\_CP1\_16>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_16>

1. Do you agree with a static determination of liquidity and determine that all EUA are liquid? If not, can you suggest any alternative methodology on how to define liquidity for EUAs?

<ESMA\_QUESTION\_CP1\_17>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_17>

1. Do you agree with the proposed framework for the deferral regime for EUAs? If not, please suggest an alternative methodology.

<ESMA\_QUESTION\_CP1\_18>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_18>

1. Do you agree with the classification of ETCs and ETNs as types of bonds?

<ESMA\_QUESTION\_CP1\_19>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_19>

1. Do you agree with the liquidity determination for ETCs and ETNs. If not, please suggest an alternative approach to the liquidity determination.

<ESMA\_QUESTION\_CP1\_20>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_20>

1. Do you agree with the pre- and post-trade thresholds? If not, please suggest an alternative methodology.

<ESMA\_QUESTION\_CP1\_21>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_21>

1. What is your view in relation to the implementation of the supplementary deferral regime for sovereign bonds?

<ESMA\_QUESTION\_CP1\_22>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_22>

1. Do you agree not to make any changes to the temporary suspension of transparency obligations framework as it currently in RTS 2?

<ESMA\_QUESTION\_CP1\_23>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_23>

1. Do you have any further comment or suggestion on the draft RTS? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_24>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_24>

1. What level of resources (financial and other) would be required to implement and comply with the draft amended RTS and for which related cost (please distinguish between one off and ongoing costs)? When responding to this question, please provide information on the size, internal set-up and the nature, scale and complexity of the activities of your organisation, where relevant.

<ESMA\_QUESTION\_CP1\_25>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_25>

**CP on the RTS on reasonable commercial basis**

1. Do you agree to the general approach used to specify the costs and margin attributable to the production and distribution of market data? Please elaborate.

<ESMA\_QUESTION\_CP1\_26>

Virtu are supportive of the general approach taken by ESMA regarding specifying costs and margin attributable to the production and dissemination of market data. We have a strong expectation that fees for market data should decrease as a result of applying this methodology. However, we believe that ESMA should be as prescriptive as possible in setting out the accounting methodology data providers are required to apply in order to derive a cost for producing and disseminating market data. This is particularly important in relation to the apportionment of joint costs and allocation of costs to specific “cost categories” as proposed in paragraph 190 and reflected in article 3 of the draft RTS (see our response to Q28 for further detail).

We are supportive of the proposal that data providers give relevant information to NCAs in a standardized format so that changes can be tracked and assessed by NCAs and scrutiny applied to assess whether a data providers’ calculation of market data fees is consistent with the RTS.

Any increase above a suitable index in the cost to produce and distribute, or the revenues generated from market data should trigger an audit of the disclosures and an RCB assessment by the NCA which should be publicly disclosed to ensure confidence that the regulatory framework is operating effectively. It is incumbent upon ESMA to ensure that these RCB provisions are applied consistently by NCAs by providing appropriate guidance.

In order to ensure compliance with the RCB framework as defined under the proposed RTS, the role and responsibilities of NCAs should be made clear and they should be both empowered to review and challenge data providers and have a clearly articulated expectation that they do so. The proposed framework will only be effective if it is subject to rigorous and consistent supervision by NCAs. We would also recommend including a mechanism whereby market data clients can raise concerns to the applicable NCA which gives rise to an investigation of the relevant data provider.

We would like to emphasis that a solid general approach specifying costs and margins, as outlined in the consultation paper, is only of value where prices truly relate to the cost of producing the data (the market data infrastructure) and does not relate to the users use of that data. This is of particular emphasis where market data producers charge multiple times for the same market data, now a common practice in spite of guidance clarifying that such was not in the spirit of the Reasonable Commercial Basis rules set out under MiFID.

<ESMA\_QUESTION\_CP1\_26>

1. Do you agree with the proposed approach to cost calculation based on the identification of different cost categories attributable to the production and dissemination of market data (i.e. (i) infrastructure costs; (ii) connectivity costs; (iii) personnel costs; (iv) financial costs; (v) administrative costs)? Please elaborate.

<ESMA\_QUESTION\_CP1\_27>

We generally agree with the proposed approach to cost calculation subject to our comments at Q28 below. We are particularly supportive of it being made clear that audit costs are not to be borne by the data user. <ESMA\_QUESTION\_CP1\_27>

1. Do you agree with the proposal of apportioning costs based on the use of resources (i.e., infrastructure, personnel, software…) for each service provided? Do you think the methodology to be used to apportion costs should be further specified? Please elaborate.

<ESMA\_QUESTION\_CP1\_28>

Yes, we believe the methodology for apportioning costs should be further specified to ensure a consistent approach is taken by data providers in order to support transparency of pricing models and enable comparison both between data providers and of prices over time from the same data provider.

Further prescription should be provided by ESMA on amortization standards and the appropriate sharing of joint costs. For example, thresholds should be established for allocating costs for employees who do not work exclusively in market data and data providers should disclose to NCAs their methodology for apportioning joint costs.

Only by incorporating uniformity in the model will the aims of comparability and assessment of compliance with the RCB provisions be achieved.

<ESMA\_QUESTION\_CP1\_28>

1. Do you agree that the net profit as defined in Article 3 of the draft RTS can be a representative proxy of the margin applicable to data fees and would you include additional principles to define when a margin can be considered reasonable? Please elaborate.

<ESMA\_QUESTION\_CP1\_29>

This formulation is contingent upon the level at which fees for market data are set (implicitly acknowledged in paragraph 3 of article 3). Whilst we see that the principles set out in article 3(2) operate as a constraint on what amounts to “reasonable margin” we do not consider these to be adequate for ensuring market data fees themselves are reasonable, particularly given the lack of granularity in the methodology for determining costs.

Further it is not entirely clear what the principle set out in paragraph 3 of article 3 aims to achieve. Market data consumption is non-discretionary for many trading firms. If a firm wishes to trade on a given trading venue, it must consume market data from that venue. By its nature and underlying many of the issues in this area is the fact that demand for market data is inelastic.

It should be made clear in article 3 that a reasonable margin can only be applied to the aggregate cost for a given data product, not per cost heading. There is a significant risk that consumers with the least elastic demand for market data will be forced to bear the greatest cost burden. Accordingly, what is considered “reasonable” should also be subject to looking at the total cost paid by a given consumer.

Virtu would recommend that additional parameters be included by reference to which “reasonable margin” is to be determined as the current approach is too vague to effectively address consumers’ valid concerns around value based pricing. In particular, we recommend including in article 3 a stipulation that “reasonable margin” cannot be determined by reference to factors such as capacity to pay or inelasticity of demand and that ESMA establish a metric or percentage of the total production and dissemination costs deemed to be “reasonable margin” issued as Level 3 Guidance. Whilst we acknowledge ESMA does not have power to prescribe the level of margin charged, this would establish a commonly agreed benchmark to which market data clients and NCAs could have reference when assessing whether margin is indeed “reasonable”.

To ensure consistency with the requirement at Level 1 that the level of fees should be determined by the cost of producing and disseminating data plus a reasonable margin, we recommend that the appropriate benchmark be set as a percentage of costs which should be the same across all consumers with cost being the main variable in determining fees (i.e., rather than a different/separate reasonable margin being permitted to be set for each category of users as proposed in paragraph 232). This would protect against consumers who have the least elastic demand being charged fees incorporating materially higher margin.

<ESMA\_QUESTION\_CP1\_29>

1. Do you agree with the proposed template for the purpose of information reporting to NCAs on the cost of producing and disseminating data and on the margin applied to data? Please elaborate, including if further information should in your view be added to the template.

<ESMA\_QUESTION\_CP1\_30>

We generally agree with the approach taken in the proposed template and support the idea of standardized reporting by venues. However, we believe there should be greater specification of how joint costs are apportioned and corresponding accountability on behalf of the data provider for justifying the approach taken to apportioning joint costs.

However, this approach will only be beneficial if there is a clear and concrete expectation that NCAs take an active role in ensuring data providers are complying with the requirements of the RTS. We see ESMA playing an important role in this regard both in setting that expectation and providing guidance to ensure supervisory convergence.

Given prior regulatory divergence in applying the Reasonable Commercial Basis rules and the importance of the consistent application of rules to enforce competition in an inelastic market -  we would argue that ESMA should centrally supervise regulated venues for these purposes. Given the CMUs objectives, we believe a single supervisor providing harmonized monitoring of exchanges would provide much needed stability in the application of rules and in operational resilience measures. Given the recent trend of the consolidation of exchanges into larger exchange groups, which has resulted in larger single points of failure in addition to uncompetitive pricing powers, we believe such a step would be to the benefit of all.

<ESMA\_QUESTION\_CP1\_30>

1. What are in your view the obstacles to non-discriminatory access to data taking into consideration the current data market data policies and agreements?

<ESMA\_QUESTION\_CP1\_31>

Virtu agrees that the complexity of licensing structures and proliferation of additional overlapping licenses for market data result in a commercial environment where it is difficult to ascertain exact licensing categories applicable to a given consumer and also result in the same data being charged for several times under multiple licenses even though it may have the same end user. This is contrary to the requirement of article 5 of the draft RTS that only one category be applicable per client in line with the principle that a user only be charged once for data.

Virtu therefore believe that usage/pricing categories should be simplified and standardized across data providers and should be limited to display, non-display and potentially one other category (we suggest “derived data” – see our response to Q42 below) to facilitate comparison, competition and scalability by data users. In particular, data providers should not charge multiple times for the same data depending on use case (e.g. levying separate charges for use of non-display data when trading as principal, when trading as a systematic internaliser, when operating an MTF, when operating a brokerage and for risk management purposes - despite consuming the data once via the same interfaces and the fact that the market data provider has only incurred the cost once.).

Data should also only be charged for once by reference to the “Natural User” as the unit of count for measuring consumption in relation to display data. An end user receiving the same data via different devices or channels should not be charged multiple times for receiving the same data, in line with the MiFIR requirements that data costs be based on the cost of producing and disseminating the data. For example, where there is only one natural user of display data, only one person is benefitting from the same data even if received via multiple channels or on multiple devices or applications. Please see our response to Q43 for further detail.

Different channels can only justify different pricing arrangements if directly associated with the cost of production and dissemination.

<ESMA\_QUESTION\_CP1\_31>

1. What are the elements which could affect prices in data provision (e.g. connectivity, volume)? Do they vary according to the use of data made by the user or the type of user? Please elaborate.

<ESMA\_QUESTION\_CP1\_32>

It is evident that data products offering different levels of granularity would entail different costs and therefore justify different pricing. For example, top of book data is substantively different to full order book data. However, we disagree that factors determining how the user consumes the data such as connectivity, volume or internal latency should be considered a legitimate factor impacting price. Typically, a market data client will already be paying separately for a faster leased line and/or co-location facility through which to receive low latency data. This suggests two principles that should be considered in this context:

1. Costs already charged to/borne by the market data client as a separate line item should not be included in the cost base for market data and therefore in the price. By way of example, a rental fee for rack space in a data centre as part of a co-location facility will be charged for separately to and should remain independent from market data. This cost is already being borne by the client and therefore including it as a cost for producing and disseminating market data is double-counting. We understand this is consistent with how data providers determine P&L targets for each division within their broader organisation, including ensuring that revenues for each division cover the costs of that division rather relying on cross-subsidisation from other areas.
2. Once data is received by a market data client, how it is used and distributed internally should not impact price regardless of how many applications, “devices” or users access that data or how it is applied internally by the market data client. The client has already been fully borne the cost of delivery at the point of receipt of the market data.

Regarding 2 above, Virtu strongly support the principle established by article 5 of the draft RTS that a user should only pay once for a set of data and that market data should be priced based on the cost of producing and disseminating the information.

To the extent that a user requires different arrangements for data provision due to the way they may use that data, this should only be reflected in price to the extent that it impacts the cost of production and dissemination of data, consistent with article 13 of MiFIR. For example, low latency connectivity may be more costly to support by the data provider and therefore justify a higher price that reflects that additional cost, but only that additional cost and no component of value based pricing.

Over the past 15 years we have observed that trading venues have consistently added additional usage categories to their market data schedules and 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, risk management practices and compliance with regulatory obligations such as risk collars, prevailing quotes and best execution.

Regarding (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, 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.

Regarding (2): As has been widely acknowledged, 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. Regulation mandates that SIs publish continuous quotes that are close in price to the most relevant market and so are required to use primary market data to ensure they meet this obligation. Also, regulation mandates that trading venues, such as those relying on the reference price waiver, use primary market data as a reference to support their prices. Exchanges that provide primary market data can hinder competition by imposing unreasonable data fees and duplicative usage categories, potentially to challenge these other trading venues. This may also be the case for investment firms that are systematic internalisers in relation to non-display data. This is another market feature which makes demand for this data largely inelastic and therefore underscores the need for pricing constraints.

Once we have ascertained the base costs plus margin for the creation of data, it then follows rationally that:

* Display data can be charged per user
* Non display data should be charged per site
* Derived data should be charged per site

No other costs are incurred by the producer and so charging more for per device usage is at odds with the aim to charge for market data based on the cost of producing and disseminating the information.

In addition to these usage based categories, data providers often have additional and costly licenses for “derived data” where the consumer uses raw data for internal applications which may involve a variety of different use cases ranging from running P&L calculations on a trading book to creating a new product from that data. The pricing associated with these licenses is another case where it is driven by the value to the consumer rather than the cost of production and dissemination of data. Automated risk management and P&L calculations are a by-product of trading and should not be charged for separately.

In terms of the data being consumed, this does not differ from general display or non-display data separately obtained under licenses specific to those products. It is just the use case that drives the demand for an additional license by data providers.

<ESMA\_QUESTION\_CP1\_32>

1. Do you agree with ESMA’s proposal on how to set up fee categories. Please justify your answer.

<ESMA\_QUESTION\_CP1\_33>

In principle, Virtu agrees with the proposal market data providers to ensure the same technical arrangements for customers belonging to the same category. However, we recognise that there may be significant practical barriers to ensuring the same level of latency and connectivity for a customer base that may be widely dispersed geographically. As a result, any discrepancies in latency or connectivity should be justifiable by the market data provider based on technical constraints and the capacities of their customers. Subject to this exception clearly tied to differential cost bases, we would support more simple and standardised fee categories, as described above<ESMA\_QUESTION\_CP1\_33>

1. Regarding redistribution of market data, do you agree with the analysis of ESMA? If not, please elaborate on the possible risks you identify and possible venues to mitigate these. In your response please elaborate on actual redistribution models.

<ESMA\_QUESTION\_CP1\_34>

Virtu experience some additional cost and complexity when receiving market data via a redistributor (or “data vendor”) however, the core of the problems driving high prices for market data and the complexity and opacity surrounding commercial arrangements lies primarily with data providers, not redistributors.

Ultimately, we see this being a matter of applying the principle evident in MiFIR and ESMA’s proposals, that a user should only be charged for the same data once subject to a reasonable price differential reflecting any additional cost of providing and disseminating that data, as reflected in article 5 of the draft RTS. We do not see that broad reaching new legislation is necessary to address the fundamental problems in this market, particularly at a time when there is discussion about streamlining EU regulation to improve international competitiveness.

Under most (if not all) redistributor models, one is able to track and verify the number of end users which can be made visible to the data provider and is often done so under so called “Per User Programmes” or “netting programmes”. Therefore requiring a redistributor to verify or confirm the number of end users who will receive the data is typically within the gift of the data provider, for example by imposing a contractual obligation on the redistributor to provide this information. Nevertheless, if the data provider is only incurring the cost of disseminating data to a single recipient when providing to a redistributor, it is not bearing the cost of onward dissemination to multiple end users. That is the function and cost burden of the redistributor. Accordingly, it is not clear why the redistribution model is inconsistent with the overarching principle of ensuring the price of market data reflects the cost of production and dissemination rather than the value to the end-user.

This extends to distribution of data within a firm. As discussed above, any redistribution fees should only be applicable to distribution to the firm recipient, not distribution to end users within the firm.

Furthermore, redistribution charges should not be charged for non-display data where that data is used within applications where non-display charges have already been levied on the intermediary. This is a clear case of double pricing.

<ESMA\_QUESTION\_CP1\_34>

1. Are there any other terms and conditions in market data agreements beyond the ones listed in this section which you perceive to be biased and/or unfair? If yes, please list them and elaborate your answer.

<ESMA\_QUESTION\_CP1\_35>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_35>

1. Please provide your view on ESMA’s proposal in respect to (i) the obligation to provide pre-contractual information, (ii) general principle on fair terms, (iii) the language of the market data agreement, (iv) the market data agreement conformity with published policies and (v) the provision on fees and additional costs.

<ESMA\_QUESTION\_CP1\_36>

We generally agree with the proposals regarding contractual terms, in particular the proposal to prohibit double application of fees for the same data.

Virtu acknowledges that for some data consumers, it will be useful to be provided with pre-contractual information. However, trading firms have no choice but to acquire market data directly from trading venues on which they trade. Accordingly, the provision of pre-contractual information will have no bearing on the fact they cannot switch providers. Each trading venue is the single non-substitutable source of market data necessary for Trading Firms to trade on that venue. This underscores the need for pricing to be subject to regulation due to the anti-competitive dynamic inherent in this relationship.

The same issue is relevant to the proposal for notice to be given of fee increases and be accompanied by a right of termination by the consumer.

Regarding fee increases, Virtu would stress these should only be once per year and take effect at a time that coincides with budget cycles given the significant impact of market data fees on the cost base of trading firms.

<ESMA\_QUESTION\_CP1\_36>

1. According to your experience, has the per-user model been inserted in the market data agreements as an option for billing? If yes, do you have experience in the usage of this option? Is the proposed wording of this option in the draft RTS useful? What are in your views the obstacles to its use?

<ESMA\_QUESTION\_CP1\_37>

Yes, it has but has been subject to some complications.

Virtu believes that an “actual usage” standard should apply for assessing compliance with a per user count and that “per user” should be the standard default measurement unit of cost for display data. Provided firms have the necessary tools to identify end users and report on a per user basis, there should not be any impediment to them being charged on this basis, including by data vendors.

Under the “potential access” standard which is currently adopted by several trading venues a display user is considered fee-liable if they potentially had the ability to access market data from a source, regardless of whether or not they actually had accessed the data. This means that simple administrative oversights or overlooked changes to the “fine print” contractual clauses for specific market data products in market data policies can render subscribers liable for substantial penalty fees, sometimes backdated without limitation, for potential access charges regardless of whether the participant can prove that the data was not accessed. This would be comparable to requiring a household to pay for the potential electricity consumption of all appliances that are connected to the mains supply rather than the energy actually consumed.

<ESMA\_QUESTION\_CP1\_37>

1. Do you agree with ESMA’s proposal on penalties? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_38>

Penalties are generally not standard practice amongst providers of other goods and services in financial services. Accordingly, we recommend ESMA make clear that penalties are not considered appropriate in the context of market data agreements as we see no justification for them.<ESMA\_QUESTION\_CP1\_38>

1. Do you agree with ESMA’s proposal on audits? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_39>

Virtu appreciate the thought behind the audit proposals made by ESMA. However, we believe they should go further to rebalance the relationship between data providers and consumers so it more closely reflects the basis of any good faith commercial relationship.

On this basis, Virtu believe audits should be an exception rather than a commonly accepted practice, only permitted when there is evidence or a reasonable belief founded in fact of a material breach of the market data agreement.

In any event, we believe audit practices should be subject to the following requirements:

1. The **scope** of an audit (business lines, feeds, time period/look-back) should be defined prior to the audit commencing and be binding throughout the audit to prevent scope creep over time, including specifying which contract the data provider is using as the basis for an audit. The audit look-back period should be capped at 2 years. In our experience, audits often expand in scope and time period after they have commenced so these parameters should be set up front and adhered to. Audit scope should respect contractual privity. If the market data client has a data agreement only with a redistributor then it is the redistributor’s responsibility to ensure any conditions of the venue are complied with.
2. **Time limited:**A reasonable fixed time should be set in advance within which the audit must be completed, including follow-up questions to prevent ongoing audits over many months.
3. **Data policy scope:**a data provider should make clear in advance which policies apply to the period subject to audit and align the audit period to the policy application period. Historical policies relevant to the audit should be made available to users to support compliance.
4. **Limited frequency:** based on the premise outlined above that an audit should only be undertaken on an exceptional basis, there should be at least 2-3 years between audits (the conclusion of one and the commencement of another).
5. **Information handling standards**: data providers and, if used, external third party auditors, should be subject to reasonable professional standards regarding use and handling of information. The body conducting the audit should be required to handle information consistently with applicable data protection regulation (including GDPR). Data providers often use a third party to conduct audits and the same third party is often used by several different data providers. These third parties should be subject to reasonable professional standards regarding use and handling of information so there’s not improper use of firm information across different data provider clients.
6. **Audit findings should potentially benefit the consumer:** typically a data consumer will be required to pay additional fees as a consequence of findings arising from an audit. If an audit reveals that a consumer has overpaid for market data, there should be scope for the consumer to be reimbursed for that overpayment. This is not typically the case today. Any time limit on retrospective liability should be mutual as should the application of interest to outstanding liabilities, whether payable to or by the market data client.
7. **Third party auditors to receive fixed fees only:** Engagement of external auditors should be subject to a fixed fee regime rather than being incentive based by reference to penalty recovery. Furthermore, third party auditors should only be used in very limited circumstances, where it is not practicable for the exchange to conduct the audit itself, such as where an audit is conducted in a different region/time-zone to where the exchange is based (e.g. a European exchange auditing an Asia-based consumer).

It is also crucial that disputes of contractual terms arising from audit should be settled by an independent arbitrator. It is inherently unfair for disputes over ambiguous contractual terminology to be solely decided by one party. Furthermore, we have seen the interpretation of terminology change over time without informing the other party - again highlighting the importance of an independent arbitrator in cases of dispute.

<ESMA\_QUESTION\_CP1\_39>

1. Would you adopt any additional safeguards to ensure market data agreements terms and conditions are fair and unbiased? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_40>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_40>

1. Do you agree with the standardised publication template set out in Annex I of the draft RTS? Do you have any comments and suggestions to improve the standardised publication format and the accompanying instructions? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_41>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_41>

1. Do you agree with the proposed list of standard terminology and definitions? Is there any other terminology used in market data policies that would need to be standardised? If yes, please give examples and suggestions of definitions.

<ESMA\_QUESTION\_CP1\_42>

Virtu believes a definition of “derived data” should be included to facilitate standardization of this concept.

As discussed above, many market data providers currently require users to pay for an additional license for “derived data” which is typically costly and expansive in scope, such that it can capture simple modifications made to core market data for internal purposes including application of a simple formula for P&L calculations.

Nevertheless, Virtu acknowledge data providers have a valid commercial interest in derived data when used to create products for sale and distribution to third parties for commercial purposes which justifies an exception to the principle that users pay the same fee regardless of what the data will be used for. Here there is a vital distinction between redistribution externally (which we agree can validly be charged for) and redistribution internally (which is unduly restrictive and results in punitive costs charged to the consumer). However, this exception should be construed narrowly and consistently across providers. Thus, we propose the following definition for “derived data”:

*“****Derived data****” shall indicate market data used in the creation, settlement maintenance or support of derivative works by a market data client for commercial purposes connected to sale or use of those derivative works by third parties, including in relation to indices or financial products. It shall not include use of market data by the market data client for internal purposes including risk management and accounting functions.*

Derived data should include works where the user has added intellectual property to the data which is not easily and readily reversible. Derived data costs should be up front. As the data has now been derived, there should be no redistribution licenses applicable.

Definitions of “Display Data” and “Non-display Data” would need to be adjusted accordingly.

<ESMA\_QUESTION\_CP1\_42>

1. Do you consider that the “user-id” and the “device” should still be considered as “unit of count” for the display and non-display data respectively? Do you think (an)other unit(s) of count can better identify the occurrence of costs in data provision and dissemination and if yes, which?

<ESMA\_QUESTION\_CP1\_43>

n relation to display data, “Natural User”, which should equate to an individual person, should be the unit of count. Provided a market data client is able to control access such that they can identify the individual corresponding to a user ID, this should be the sole unit of count applicable regardless of how many screens, terminals, applications or other “devices” those individuals may use to access the data. To the extent that a market data consumer uses their own infrastructure to disseminate data internally, this should not result in additional cost to the consumer, in line with the terms of article 5 of the draft RTS.

In relation to non-display data, Virtu considers the concept of “device” to be problematic (at least in its current application by data providers) and somewhat outdated. We go into further detail regarding its shortcomings below. However, whilst “device” is far from ideal, it is extremely challenging to determine an acceptable alternative, particularly one that caters for different sized consumer firms with different usage patterns. Ideally, an entirely conceptually different approach would be adopted. Given how central it is to fairness in pricing and commercial arrangements and also to transparency and predictability of charges for data consumers, it is an issue worth further consideration. We therefore recommend that ESMA continue to work with market participants to develop a fair, simple and comprehensive alternative unit of count for non-display data after this consultation period has closed, which could form the basis of ESMA Level 3 guidance to supplement the proposed RTS.

**Problems with “device” as a unit of count:**

Definitions of “device” adopted by data providers are extremely broad and so vague as to create uncertainty on behalf of the data consumer regarding their ultimate fee liability. This often isn’t known until an audit has been conducted and a consumer will either face penalties for underpayment or find they have overpaid but cannot recoup the excess.

As systems are required to be more resillient, more devices are introduced thus increasing costs and increasing the costs to have adequate operational resilience. Non display usage should be charged at a site level, and should be priced based on the cost of producing and disseminating the information as it does not make sense to charge it similar to displayed data. For non-displayed data, trying to audit who has accessed a risk system, that may use data, who has accessed a valuation system that uses non display data, seems at odds with the intention to charge for the cost of creation of this data plus a suitable margin. If I add an extra application to help in risk monitoring it shouldn't increase the costs of consuming the non display data, as there are not incremental costs on the data producer.

To do so would be in contravention to ESMA's stated main principle that market data should be priced based on the cost of producing and disseminating the information.

In addition, it is very difficult to verify/log accurate device count. It’s our understanding that only one third party entitlement system currently supports an accurate device count and if firms do not have access to this  system (or even where they do) they are often open to penalties via audit processes due to an inaccurate assessment by the data consumer. Furthermore, if an exchange offers a tiered fee model, it is not possible to qualify for any of the lower consumption tiers unless this sole third party entitlement system is used, thus forcing market data consumers to acquire this specific system. Otherwise, they automatically fall within the highest, most expensive fee tier. The definition of “device” should be clear and precise so determining fee liability is a simple and verifiable process without having to rely on a third party entitlement system. Ultimately, data consumers should have certainty over how much they will be charged for data in a given period by reference to a clear, concise, verifiable definition.

Furthermore, the way charging by “device” for non-display currently operates penalises market data clients for the decisions they make regarding their own internal distribution, data centre set-up and operational resilience measures. Any market data client using a separately co-located server as well as their basic non-display trading application will be charged for two devices. If that client chooses to have two data centres for resiliency purposes, they will be charged for three devices. Firms generally split their UAT environment from their production environment which is not only good practice but is also generally a regulatory requirement, then that becomes six devices. This multiplies quickly when additional servers are added for different trading strategies. These practices are adopted by firms who are seeking to create stable and resilient trading environments to ensure minimal market disruption, yet they are being penalized by duplicative market data fees for doing so.

Accordingly, the concept of “device” as a unit of count should be removed.

Finally, the concept of “simultaneous access” is often incorporated into the definition of “device”. If a device has the ability to access data multiple times simultaneously, each potential simultaneous instance of access is charged for. In this regard, we express a strong preference for application of an “actual usage” standard as outlined in our response to question 37 rather than potential usage as to do otherwise in this context is double-charging.

<ESMA\_QUESTION\_CP1\_43>

1. Do you foresee other types of connectivity that should be defined beside “physical connection” to quantify the level of data consumption? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_44>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_44>

1. Do you think there is any other information that market data providers should disclose to improve the transparency on market data costs and how prices for market data are set? If yes, please provide suggestions.

<ESMA\_QUESTION\_CP1\_45>

Red-lines of market data policies should be made available on the data providers website in an easily accessible place, with versions clearly labelled and dated so it is clear to consumers what changes have been made when in order to support compliance with their terms.

While ESMA has stated that they do not wish to enforce market data vendors to publish costs, we believe that simple metrics should be published such as the incremental cost of new market data connections by connection type, to encourage competition in driving down costs in the industry.

While knowing the method in market producers pricing can be beneficial, it does little to foster competition. Without publicly declaring costs, market data vendors have no incentive to decrease costs as they are aware that demand is inelastic - and higher costs results in higher profits given a consistent profit margin.

We would argue that ESMA reconsider this position as transparency on costs has little value if prices continue to rise.

<ESMA\_QUESTION\_CP1\_45>

1. Do you agree with the approach on delayed data proposed by ESMA? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_46>

Delayed data should be available in the same format as the same live market feed and via the same infrastructure as the live data, just delayed by 15 minutes) and available to download for up to one week after creation for free, not just for a very limited period after the 15 minute window has passed.<ESMA\_QUESTION\_CP1\_46>

1. Do you agree with the proposal not to require any type of registration to access delayed data? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_47>

We agree with ESMAs view that registration practices should not hamper access to delayed data nor should it impose unnecessary barriers. To the extent that a data provider needs a contact to service the relevant account, details of a designated administrator at the market data client should suffice. It is not necessary for a data provider to have contact details for all users of delayed data within a firm.<ESMA\_QUESTION\_CP1\_47>

1. ESMA proposes the RTS to enter into force 3 months after publication in the OJ to allow for sufficient time for preparation and amendments to be made by the industry. Would you agree? Would you suggest a different or no preparation time? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_48>

On the understanding that the final (or at least near final) text of the RTS would be available at the end of this year, we don’t consider it necessary to allow for an implementation period longer than the proposed 3 months. However, we acknowledge ESMA’s proposals may require data providers to make substantial changes to their current operations and so we would not object to a longer implementation period if ESMA considers it necessary, for example 6 months.<ESMA\_QUESTION\_CP1\_48>

1. Do you have any further comment or suggestion on the draft RTS? Please elaborate your answer.

<ESMA\_QUESTION\_CP1\_49>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_49>

1. What level of resources (financial and other) would be required to implement and comply with the RTS and for which related cost (please distinguish between one off and ongoing costs)? When responding to this question, please provide information on the size, internal set-up and the nature, scale and complexity of the activities of your organisation, where relevant.

<ESMA\_QUESTION\_CP1\_50>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_50>

**CP on the amendment of RTS 23**

1. Do you agree with the proposal for a daily reporting of reference data for both transaction reporting and transparency purposes?

<ESMA\_QUESTION\_CP1\_51>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_51>

1. For the purposes of both equity and non-equity transparency, do you prefer to retain the MiFIR identifier as currently defined or to rely on other fields for classification purposes? If latter, please outline the proposed solution.

<ESMA\_QUESTION\_CP1\_52>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_52>

1. Is in your view, the granularity level of the MiFIR identifier adequate for the purposes of MiFIR transparency in the equity and non-equity space? If not, how should it be adjusted?

<ESMA\_QUESTION\_CP1\_53>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_53>

1. How do you expect the change in scope of instruments subject to transparency to impact transparency reference data? Would you agree to maintain the current whole set of reference data for non-equity instruments, currently in RTS 2, in RTS 23? If not, please specify which reference data should not be retained in the view of the revised scope.

<ESMA\_QUESTION\_CP1\_54>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_54>

1. Do you agree with deleting Field 5 of RTS 2, Annex IV, and use the CFI code for the purposes of derivatives’ contract type classification?

<ESMA\_QUESTION\_CP1\_55>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_55>

1. Do you agree with the proposed alignment between RTS 23 and RTS 2 as set out in this section? Please provide details on which alignment is (not) feasible and why, considering the impact in terms of comprehensiveness and consistency of the reported information.

<ESMA\_QUESTION\_CP1\_56>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_56>

1. As it concerns “underlying type” classification, do you agree with the proposed reliance on CFI and other reporting fields? With specific regards to Field 27, do you have proposals on how that field may be streamlined?

<ESMA\_QUESTION\_CP1\_57>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_57>

1. Do you see additional room for simplification and/or alignment of reference data for transaction reporting and transparency purposes? What would be the impact in terms of one-off and ongoing costs, benefits and change management of such simplifications, in particular with respect to reducing and consolidating data flows to ESMA that exist currently?

<ESMA\_QUESTION\_CP1\_58>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_58>

1. Do you have suggestions on how the fields mentioned above may be improved and streamlined?

<ESMA\_QUESTION\_CP1\_59>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_59>

1. Do you agree with the above assessment of the necessary adjustments to be made in the RTS 23 to accommodate for the identifying reference data?

<ESMA\_QUESTION\_CP1\_60>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_60>

1. Do you see a need to specify the ‘date by which the reference data are to be reported’ different from the date of application or have other comments with regards to the proposed timeline? If so, please specify.

<ESMA\_QUESTION\_CP1\_61>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_61>

1. Are there any other international developments or standards agreed at Union or international level that should be considered for the purpose of the development of the RTS on reference data?

<ESMA\_QUESTION\_CP1\_62>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_62>

1. Do you agree with the changes proposed in the tables above? Should any other changes be considered to align the MiFIR reporting specifications with the international standards, EMIR and / or SFTR?

<ESMA\_QUESTION\_CP1\_63>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_63>

1. Do you foresee any challenges with the proposed approach under which the CSDR publications would be integrated in FIRDS?

<ESMA\_QUESTION\_CP1\_64>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_64>

1. Do you have any comments with regards to the inclusion of additional fields in the instrument reference data published by ESMA to indicate whether the instrument is in the scope of CSDR and to specify which MIC corresponds to a venue with the highest turnover or the most relevant market in terms of liquidity?

<ESMA\_QUESTION\_CP1\_65>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_65>

1. Do you support inclusion of the new fields listed above?

<ESMA\_QUESTION\_CP1\_66>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_66>

1. Do you agree with the amendment listed above for the existing fields?

<ESMA\_QUESTION\_CP1\_67>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_67>

1. With regards to monitoring of de-listing and re-admission, which option is preferable in your view: (i) reporting by the trading venue of all previous trading periods in the repeatable fields 10, 11 and 12 or (ii) implementing adequate reporting logic of events impacting the instrument (new, modification, termination etc) in order to enable ESMA to reconstruct all trading periods?

<ESMA\_QUESTION\_CP1\_68>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_68>

1. Do you support suppressing the reporting of the fields listed above?

<ESMA\_QUESTION\_CP1\_69>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_69>

1. Do you foresee any challenges with the use of JSON format comparing to XML? Please provide estimates of the costs, timelines of implementation and benefits (short- and long term) related to potential transition to JSON.

<ESMA\_QUESTION\_CP1\_70>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_70>

1. In addition to including a field to identify the DPE, are there any other adjustments needed to enable comprehensive and accurate reporting of reference data by the DPEs?

<ESMA\_QUESTION\_CP1\_71>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_71>

1. With regards to the categorisation of classes of financial instruments for the purpose of the DPE register, how such classes should be designated in the register? Is there any further information that should be included in the register to ensure its usability and interoperability with other relevant systems? Do you foresee any practical implementation challenges, and if so, how they could be mitigated?

<ESMA\_QUESTION\_CP1\_72>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_72>

1. Are any other adjustments needed to enable comprehensive and accurate reporting of Article 8a(2) derivatives under RTS 23?

<ESMA\_QUESTION\_CP1\_73>

TYPE YOUR TEXT HERE

<ESMA\_QUESTION\_CP1\_73>