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

Technical Standards related to Consolidated Tape Providers and DRSPs, and assessment criteria for the CTP selection procedure

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\_CP2\_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\_CP2\_nameofrespondent.

For example, for a respondent named ABCD, the reply form would be saved with the following name: ESMA\_CP2\_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.

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# General information about respondent

|  |  |
| --- | --- |
| Name of the company / organisation | Euronext |
| Activity | Regulated markets/Exchanges/Trading Systems |
| Are you representing an association? |  |
| Country/Region | Europe |

# Questions

Section 3 – RTS on input and output data of CTPs:

**Q1: Do you agree with grounding the assessment framework of the quality of transmission protocols on the identified categories of technical criteria?**

<ESMA\_QUESTION\_CP2\_1>

Yes, Euronext agrees. with grounding the assessment framework on the identified list of criteria. We would underline that as these criteria may be mutually in competition with each other (i.e. encryption will improve security but decrease performance). For this reason, associating a weighting element could help to focus on those that are the most important for the context at hand (i.e. performance and reliability).

<ESMA\_QUESTION\_CP2\_1>

**Q2: Do you believe that additional categories of technical criteria should be considered for the definition of minimum requirements of the quality of transmission protocols?**

<ESMA\_QUESTION\_CP2\_2>

Yes, Euronext believes that additional categories of criteria should be considered for this purpose. Apart from the technical criteria, financial elements could also be good elements to take into consideration, recurring costs for connectivity bandwidth in particular (both for data contributors providing data to the CTP and the CTP to customers).

<ESMA\_QUESTION\_CP2\_2>

**Q3: Do you agree with the proposal of introducing a single set of requirements across the three asset classes (equity, bonds, derivatives), or do you believe that different requirements should be tailored for each asset class?**

<ESMA\_QUESTION\_CP2\_3>

Yes, Euronext agrees, it will simplify significantly the implementation complexity.

<ESMA\_QUESTION\_CP2\_3>

**Q4: Do you consider that the proposed minimum requirements for the technical criteria related to performance are technically feasible, coherent with the objective of high-quality data transmission to the CTP and in line with international standards? Please elaborate your response.**

<ESMA\_QUESTION\_CP2\_4>

No, Euronext does not believe that the proposed minimum requirements are all technically feasible. This is notably because many of them will depend on other variables that are not yet known at this stage.

* Typically, the throughput required will vary depending on latency requirements and on the protocol selected.
* Latency requirements should not be expressed as a maximum but as a median because of the unknown location of the data center of the CTP. It is not possible to ascertain whether given proposed minimum requirements are technically feasible without knowing the location of the data center.

In any case, latency and throughput are the most important elements to ensure reliable and efficient connectivity.

In addition, the latency requirements should be defined in an inclusive way, so as to level the playing field between trading venues and data contributors at large. Otherwise, there is a risk of putting smaller venues at a disadvantage, and notably to further disincentivise the participation of small markets to the CTP and not having in the long run a comprehensive view of the European market landscape. This point needs to be paid attention to and properly evaluated. Indeed, as acknowledged by ESMA, data latency may vary depending on the contributor’s processing at the data source (e.g., OTC data reported via an APA). In this context, the varying technical capabilities of potential data contributors are an important factor to consider. Ambitious minimum transmission requirements may deter smaller market operators from participating in the mechanism if enormous investments in IT infrastructure are required to meet the respective 50 ms and 100 ms fixed thresholds proposed by ESMA, which could be particularly challenging for smaller exchanges. Overall, an incomplete set of data providers would reduce the value that the CTP intends to provide to data users.

<ESMA\_QUESTION\_CP2\_4>

**Q5: Do you consider that the proposed minimum requirements for the technical criteria related to reliability are technically feasible, coherent with the objective of high-quality data transmission to the CTP and in line with international standards? Please elaborate your response.**

<ESMA\_QUESTION\_CP2\_5>

Yes, Euronext agrees. In particular, Euronext believes it critical to recognize the mechanisms which are already natively embedded on basic transport protocols (i.e. TCP) as valid Error detection, Error correction mechanisms and Recovery mechanisms. Indeed, to simplify implementation whilst achieving desired latency, we believe that it is best to leverage the technology already implemented on all network equipment rather than building specific mechanisms, so long as the existing arrangements provide for the same performance regarding reliability criteria. Building specific mechanisms when alternatives exist may not be efficient.

<ESMA\_QUESTION\_CP2\_5>

**Q6: Do you consider that the proposed minimum requirements for the technical criteria related to security are technically feasible, coherent with the objective of high-quality data transmission to the CTP, and in line with international standards and other EU regulatory frameworks on information security (e.g. DORA)? Please elaborate your response.**

<ESMA\_QUESTION\_CP2\_6>

No, Euronext believes that the draft RTS should draw a clear difference between (i) security requirements applicable for inbound feeds (i.e. the feeds between the data contributors and the CTP and (ii) outbound feeds (i.e. the feeds distributed by the CTP to market participants at large).

* Security requirements applicable to inbound feeds should be the same as the one applicable to data contributors as part of their standard business operation (i.e. their core data contributor activity) and no extra-layer of security requirements should apply to these. This is because these feeds already implement secured transport, authentication and authorization, with performance standards that take into account the fact that these feeds are handled exclusively in a private – and hence more controllable – network of connectivity with recipients of the feeds. Euronext current market data feeds implement secure transport, authentication and authorization leveraging on private network connectivity with the consumer. The addition of one or several CTPs will not materially impact this distribution landscape, hence requirements should remain unchanged versus today.
* Security requirements applicable to outbound feeds should, in contrast, be covered by specific standards, as the network will be de facto a new one and more open. The standards proposed by ESMA in the draft RTS appear consistent with the security objective. For connectivity between the CTP and customers, it makes sense to incorporate these requirements at protocol level, **except non-repudiation**, to simplify network connectivity with end customers. We would note that non-repudiation is currently not required for orders sending from members, neither for exchanges between the trading venues and CCPs. If it were, this would introduce an overcomplication of implementation, misaligned with the current security practices in place. The current practice when a flow of messages is exchanged between parties is for each of them to implement a network level capture of flows being sent / received. While this is obviously not akin to non-repudiation it provides a cost-effective solution for the needs of troubleshooting and identifying root cause in real life scenarios of data loss / data corruption.
* Regarding whether the minimum requirements are in line with international standards and other EU regulatory frameworks on security we see no apparent inconsistencies.

<ESMA\_QUESTION\_CP2\_6>

**Q7: Do you consider that the proposed minimum requirements for the technical criteria related to compatibility are technically feasible, coherent with the objective of high-quality data transmission to the CTP and in line with international standards? Please elaborate your response.**

<ESMA\_QUESTION\_CP2\_7>

Yes, Euronext partially considers that the proposed minimum requirements for the technical criteria related to compatibility are technically feasible, coherent with the objective of high-quality data transmission to the CTP and in line with international standards. Euronext fully agrees that an open solution is critical. However, Euronext believes that the importance of interoperability varies depending on whether this applies to the inbound feeds (i.e. the fees between data contributors and the CTP) or outbound feeds (i.e. the feeds from the CTP to market participants at large). Euronext does not believe that interoperability is critical for the feed from the data contributor to the CTP as the number of parties involved is limited. We believe that this criterion is much more important for the outbound feed towards end consumers.

<ESMA\_QUESTION\_CP2\_7>

**Q8: Do you agree with the proposed definition of “transmission of data as close to real time as technically possible”? If not, please explain.**

<ESMA\_QUESTION\_CP2\_8>

No, Euronext does not fully agree with the proposed definition of “transmission of data as close to real time as technically possible”.

First regarding latency requirements *per se*, what can be technically achieved depends highly on the constraints applied. For a system that needs to respect in an equally important manner both latency and data quality over widely spread geographies and types of systems/contributors, we could consider the proposed constraints realistic and achievable provided that:

* The “proposed latency” corresponds to median latency in nominal conditions.  
  Market data and in particular pre-trade information can be subject to high spikes of volume for very brief periods (<50ms) that may have a negative impact on the last percentile depending on the defined protocol, network bandwidth, etc.
* In addition, even if definition focuses on defining median or percentile target for latency, the latency requirements should be defined in an inclusive way, so as to level the playing field between trading venues and data contributors at large. Otherwise, there is a risk of putting smaller venues at a disadvantage, and notably to further disincentivise the participation of small markets to the CTP and not having in the long run a comprehensive view of the European market landscape. This point needs to be paid attention to and properly evaluated. Indeed, as acknowledged by ESMA, data latency may vary depending on the contributor’s processing at the data source (e.g., OTC data reported via an APA). In this context, the varying technical capabilities of potential data contributors are an important factor to consider. Ambitious minimum transmission requirements may deter smaller market operators from participating in the mechanism if enormous investments in IT infrastructure are required to meet the respective 50 ms and 100 ms fixed thresholds proposed by ESMA, which could be particularly challenging for smaller exchanges. Overall, an incomplete set of data providers would reduce the value that the CTP intends to provide to data users.
* The CTP main (and potentially secondary) datacenter is located in a Central geographical location with well serviced network lines (like Frankfurt, Paris or Amsterdam) – any alternative locations should be accompanied by a corresponding buffer to the median latency requirement. In the absence of such a mechanism, the risk is to unlevel massively the playing field for data contributors which are today geographically widespread across the EU.
* The latency is based on the below points of measurement:
  + The starting point for latency measurement should be defined(i) for post-trade feeds as the execution time recorded under the execution timestamp (as proposed, and as used for post-trade publication and transaction reporting currently) and (ii) for BBO feeds as the order entry timestamp and/ or the book entry of the triggering event within the matching engine leading to the change of BBO (which can be triggered by several events including, order arrival but also trade matching, cancellation etc.) This time stamp is already used for current pre-trade market data order storage and reporting under RTS 24 or as per field #1 “submission date and time” of Table 1b Annex RTS 1 proposed in ESMA’s Consultation paper – Reference: ESMA74-2134169708-7011.
  + The arrival point for latency measurement should be defined as the entry point of the message to the CTP consolidation network.
* If data contributors are required to respect a latency requirement, it is necessary to provide them in the draft RTS with the means to measure and/ or receive from the CTP the accurate measure of the latency related to their obligations.
* In addition, more specifically for BBO data, for the reasons outlined below we do not believe that dedicated latency requirements should be defined for these feeds and we believe it critical to provide additional requirements for the ordering of BBO by the CTP.
  + The most orderly way to convey aggregated information on BBO to market participants will be to require the CTP to re-order BBO based on the order entry timestamp.
  + Indeed, the drop of quality due to latency described in the Consultation Paper is only relevant if the CTP is not re-ordering the BBO based on the order entry timestamp. In contrast, BBO re-ordering by the CTP based on the order entry timestamp would completely remove the impact of network latency variability or geography. It would ensure a perfect accuracy while still being able to provide a continuous feed with an end to end of 200-300ms latency as proposed in the consultation.
  + In contrast, not requiring re-ordering messages would convey a fallacious representation of the BBO reality across European markets as: (i) the quality of the data will be highly dependent on the latency variability introduced by the network and geographical distances, (ii) it will provide a view of the EBBO as perceived from the location of the CTP data centers and (iii) it will create an unfair competitive advantage for data contributors located closer to the CTP data centers as their BBO will reach the CTP first with more chance to set the EBBO. This is because, in contrast to the US, where trading venues are located within a 65 km triangle, European data contributors are very dispersed geographically: the average and median distances between the 5 main trading datacenters is 1300 km.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Distance between the main European financial data centers** | | | | | |
|  | **To Bergamo** | **To Frankfurt** | **To London** | **To Madrid** | **To Stockholm** |
| **From Bergamo** |  | 500 km | 1000 km | 1200 km | 1600 km |
| **From Frankfurt** | 500 km |  | 600 km | 1500 km | 1200 km |
| **From London** | 1000 km | 600km |  | 1300 km | 1400 km |
| **From Madrid** | 1200 km | 1500 km | 1300 km |  | 2600 km |
| **Stockholm** | 1600 km | 1200 km | 1400 km | 2600 km |  |

* So, to complement paragraph 44, even if the BBO input data is transmitted with a very low latency, if the BBO data input received by the CTP is not re-ordered by the CTP in accordance with the order entry timestamp as per RTS 24 definition or as per field #1 “submission date and time” of Table 1b Annex RTS 1 proposed in ESMA’s Consultation paper – Reference: ESMA74-2134169708-7011, the BBO data output of the CTP will give a false view of BBO reality across European markets. Taking the example of a Swedish stock, and imagining that the CTP is located in Frankfurt, if BBO input data are not re-ordered by the CT, and orders executed at the very same time on two different markets, one in London and one in Stockholm, the CT will mechanically be able to receive and publish the BBO data from data contributors which datacenters are located in London 2 times faster than the BBO data from data contributors which datacenters are located in Stockholm. Hence the BBO data published by the CTP will be erroneous and misleading. BBO re-ordering by the CT to make sure all BBO are ordered in accordance with the order timestamp is critical and should be deemed a priority. From a cost perspective will not increase investment or run costs for the CTP versus an absence of re-ordering.
* The incoming RTS 1 should also clarify precisely the definition of the publication timestamp for orders.

<ESMA\_QUESTION\_CP2\_8>

**Q9: Should ESMA consider specific rules for real-time transmission of transactions subject to deferred publication?**

<ESMA\_QUESTION\_CP2\_9>

Yes, Euronext believes that ESMA should consider specific rules for real-time transmission of transactions subject to deferred publication. For these transactions, the timing should align with that of the deferred publication authorisation and allow data contributors to transmit to the CTP the transactions subject to deferred publication with the applicable deferral provided these transactions are correctly flagged for this purpose as per RTS 1 and 2. To ensure an orderly implementation, the data contributor should be required to transmit the transactions to the CTP after the application of the relevant deferrals.

<ESMA\_QUESTION\_CP2\_9>

**Q10: Do you agree with the baseline proposal of adopting JSON as standards and format of data to be transmitted to the CTPs, or do you prefer alternative proposals? Please justify your answer and, if needed, provide additional advantages and disadvantages related to each proposal.**

<ESMA\_QUESTION\_CP2\_10>

Whilst it is not impossible it is not the approach we would recommend for the CT (see reflections outlined below) as the outcome could be suboptimal.

Euronext believes that binary encoded protocol such as FIX, SBE (both widely used in market data or other more common protocols across industries like Avro) would be more sensible to achieve the targeted objective of providing low latency feeds at reasonable network costs (both from data contributor to CTP and CTP to end customer).   Based on our experience, the difference in size (and therefore in required bandwidth) between an ASCII based message such as JSON and a binary encoded message feed is x2 to x3 for the type of data considered (i.e. mainly numerical values).  This consideration is particularly relevant for data contributors transmitting large amounts of data.

Euronext believes that more attention should be allocated to the grammar (i.e. how the information is described) and kinematics (i.e. how information is expected to be sequenced and/or split within subsequent related messages) of the protocol than to the language, including defining whether standards in this respect should be the same or distinct depending on asset classes. Based on our experience developing a data distribution system with a new grammar/kinematics (different to one we already use) will require 10 to 15 months of work after the protocol if fully defined (including data quality rejection process) to the production availability (i.e. when the system is ready for go-live). A similar effort will be required for each asset class if the specifications are significantly different. In short, regardless of the protocol used, key for the data providers will be that there are stable and known grammar and kinematics of the protocol.

As a final comment, although not directly related to the question of this consultation, Euronext notes that ESMA is considering the use of JSON format for reporting in a number of areas (i.e. RTS3, RTS21, RTS23). It is **critical that any approach ESMA decides to take in relation to reporting formats must be holistic and seek to progressively extend to all areas and reporting layers**; otherwise it will not produce benefits and instead would lead to additional complexity and unnecessary cost. Fundamentally, any evolution towards the JSON format must as a prerequisite receive full endorsement from all NCAs and commitment that they will also adjust their practices and requirements in favour of a new **unique format**. Euronext has experienced inefficiencies linked to NCAs that currently sometimes require and request different reporting formats for operational reasons for the same reporting purposes. A broader evolution towards JSON can only be meaningful and successful if such discrepancies can be dismantled in favour of a unique format that is used by all. Lastly, given that this would be a significant structural change, it is important that sufficient implementation time is provided for this transition (between 6 – 12 months at a minimum) and it is necessary that any evolutions towards this only be taken in a context where it can be confirmed to the industry by ESMA that JSON would be the go-to format for the foreseeable future and that at a minimum no new reporting format would be introduced or required in the coming 5 to 8 years.

<ESMA\_QUESTION\_CP2\_10>

**Q11: Do you believe that the proposed standards and formats (baseline and any alternatives) are coherent with other CTP requirements (transmission protocols, real-time transmission and presentation of output data)? Please justify your answer.**

<ESMA\_QUESTION\_CP2\_11>

Yes, Euronext partially agrees that the proposed standards and formats are coherent with other CTP requirements. However, it is not the approach we would recommend:

* Euronext believes that binary encoded protocol such as FIX, SBE (both widely used in market data or other more common protocols across industries like Avro) would be more sensible to achieve the targeted objective of providing low latency feeds at reasonable network costs (both from data contributor to CTP and CTP to end customer). Based on our experience, the difference in size (and therefore in required bandwidth) between an ASCII based message such as JSON and a binary encoded message feed is x2 to x3 for the type of data considered (i.e. mainly numerical values).
* This consideration is particularly relevant for data contributors transmitting large amounts of data, so one possible approach could be to let a contributor choose between 2 protocols (for example JSON and Avro). In this case a conversion will be required on the CTP side but the latency introduced will be marginal compared to the geographic latency variability.
* In addition, Euronext believes that more attention should be allocated to the grammar (i.e. how the information is described) and kinematics (i.e. how information is expected to be sequenced and/or split within subsequent related messages) of the protocol than to the language, including defining whether standards in this respect should be the same or distinct depending on asset classes. Based on our experience developing a data distribution system with a new grammar/kinematics (different to one we already use) will require 10 to 15 months of work after the protocol if fully defined (including data quality rejection process) to the production availability (i.e. when the system is ready for go-live). A similar effort will be required for each asset class if the specifications are significantly different.

<ESMA\_QUESTION\_CP2\_11>

**Q12: Do you find more suitable to prescribe one single format across the 3 CTPs (equity, derivatives, bonds) or to prescribe distinct formats according for different asset classes?**

<ESMA\_QUESTION\_CP2\_12>

Yes, Euronext finds more suitable to prescribe one single format across the 3 CTPs. We believe that the format should also encompass kinematic and grammar aspects. Aligning the format across the 3 CTPs would be most suitable both regarding the data feeds between data contributors and CTPs and regarding data quality/rejection aspects.

<ESMA\_QUESTION\_CP2\_12>

**Q13: Do you support the proposals on core and regulatory data? In particular, are there other relevant fields to be added to the regulatory data? Furthermore, would you propose the inclusion of supplementary fields for input core market data beyond those intended for dissemination by the CTP?**

<ESMA\_QUESTION\_CP2\_13>

No, Euronext does not fully support the proposals on core and regulatory data.

* The implementation of the “system trading status” under the currently proposed wording will be misleading in certain instances; some degree of flexibility should be kept to ensure that the approach taken makes sense in light of the specific market organization of certain data contributors. For example for Euronext, OPTIQ (i.e. the trading technology) technically manages so called “segments” which correspond to asset classes. One segment (e.g. fixed income) may be down/halted for a technical reason while other segments (e.g. equities) could remain operational all the while sharing the same segment MIC. Similarly, the same instrument can be traded in several currencies within the same system/MIC but may have different status meaning that one currency could be halted whilst the other is still tradable.
* In addition, Euronext believes that the flag used to identify the type of trading system (as per paragraph 78) should be defined with a sufficient level of granularity and consistency with existing market practices. A relevant benchmark would be the FIX MMT (level 1 market mechanism)
* Lastly, whilst we are mindful that the proposals on core market data for the equities and ETFs tape are being consulted upon separately, we believe it critical to ensure that the data input required from the data contributors to the CTP corresponds fully with the output data of the CTP, as proposed in ESMA’s Consultation Paper Reference: ESMA74-2134169708-7011. Pre-trade data from data contributors to the CTP should as such be strictly limited to top of book anonymized BBO data. Anything different would not be in line with the L1 text and would also increase the Consolidated Tape’s setup and run costs. For background, it should be noted that the provision of BBO5 would require at least 3 times more bandwidth (compared to BBO1 only) and it would also introduce additional latency during daily peak due to higher volatility on lower limit during these moments. Lastly the CTP would need to process and filter unnecessarily 2/3 of all data received from the contributor.
* There is also an important point to be made regarding regulatory data for the fixed income tape as it seems that the provisions and rationale around regulatory data may have been developed with equities in mind and that the notion and underpinning rationale in a bond context is less obvious. Indeed, it is our understanding that the aim of regulatory data as outlined by Recital 13 is to keep investors informed of the status of the system matching orders, for example in the event of a market outage, and of the status of the financial instrument, for example in the event of suspensions or trading halts. For equities, price discovery typically originates from the primary exchange who performs a core price formation function. In addition, for equities one can observe that trading activity is linked to the availability of the instrument for trading on the primary exchange. The scenario is different for bonds where trading activity is instead distributed widely across several trading venues and OTC. The status of financial instruments or matching systems is not linked in the same way to potential trading activity or lack thereof. Regulatory data for bonds would involve significant resources to maintain this flow of information given the very large universe of bonds compared with shares, and we question the benefit of this for investors. We are concerned this could detract from the core aim of the Bond CTP to consolidate bond market data.

<ESMA\_QUESTION\_CP2\_13>

**Q14: Do you support the proposal of machine-readable and human-readable formats outlined in this section?**

<ESMA\_QUESTION\_CP2\_14>

Yes, Euronext supports the proposal of machine-readable and human-readable formats outlined in this section.

<ESMA\_QUESTION\_CP2\_14>

**Q15: Do you agree with the proposal of data quality measures and enforcement standards for input data?**

<ESMA\_QUESTION\_CP2\_15>

No, Euronext does not fully agree with the proposal of data quality and enforcement standards for input data.

* The definition of data quality measures and enforcement standards should exclude cases that are related to market abuse or erroneous trades due to a trading member and should focus exclusively on issues related to the performance of the data contributor.
* In addition, it is important to split this requirement between those that could be fully automated to ensure the best latency, and those that will require further manual processing with different latency constraints.
  + From a data contributor perspective all quality issues resulting from the technical liaisons between systems should be embedded in the transport protocol. For example, “confirmation of receipt”, “error flagging” and potential “re-sending” in case of lost connection can be ensured by embedded features of the TCP layer. This will guarantee the lowest latency for the resolution.
  + In contrast, “functional” data quality (bad message format, invalid field, etc.), which by nature will need further analysis and/or potential software correction will take time to be analyzed and processed (likely involving manual analysis)  
    An adapted definition of the rejection message, and a properly calibrated “re-submission” mechanism needs to be defined across asset classes for implementation.
* In addition, the identification of erroneous trades is already performed at the execution venue/matching engine level, and is one of their core functions. We do not see how the CTP could further improve the data quality. It is even possible that would drive false positive rejection from the CTP. For this reason we strongly advise against introducing CTP interference in this respect.
* Finally, we expect the main source of rejection to be coming from a potential inconsistency between data contributor and CTP referential data. This is why the alignment of referential elements should be embedded in the systems to prevent inconsistencies at the source.

<ESMA\_QUESTION\_CP2\_15>

**Q16: Do you agree with the proposal of data quality measures for output data?**

<ESMA\_QUESTION\_CP2\_16>

Yes, Euronext agrees with the proposal of data quality measures for output data, as outlined in Article 10(1), (2), (3), and (10) of the RTS. A prerequisite for a truly valuable CT is the delivery of a high quality and reliable consolidated view of the market. To achieve this, it is crucial that the CTPs have sound and thorough procedures to prevent erroneous interferences with data quality and can operate with the utmost levels of robustness and continuity. The CTP should have solid mechanisms in place to ensure it does not introduce its own mistakes and errors in the output data.

<ESMA\_QUESTION\_CP2\_16>

Section 4 – RTS on the revenue distribution scheme of CTPs:

**Q17: On the basis of the issue presented in the above paragraph, what do you think is the right approach to identify a trading venue and group? How could a trading venue and a group be identified? How should the links with investment firms be determined?**

<ESMA\_QUESTION\_CP2\_17>

Euronext believes that all the criteria should be computed using the segment MIC, as many SME markets are operated under a segment MIC but not necessarily a dedicated operating MIC. In addition, the use of the segment MIC would de facto render the computation easier as the use of the operating MIC would mean volumes executed on non-equities and yet executed under the same operating MIC as volumes executed on equities will have to be subtracted.

<ESMA\_QUESTION\_CP2\_17>

**Q18: Do you agree with the above assessment? If not, please explain.**

<ESMA\_QUESTION\_CP2\_18>

No, Euronext does not fully agree with the above assessment. We believe the definition of criteria 2 and the accompanying indicators to enable computation needs to be properly crafted to properly incentivize the venues which support EU capital markets by enabling issuers to raise capital.

* “Initial admission to trading” should encompass all initial admission to trading capital operations, and not be solely restricted to IPOs and identified as per the below. It is essential that ESMA and the CTP can practically identify the operations that qualify for the “initial admission to trading” criterion (i.e. type of operation and compliance with the conditions), as well as the venue on which they are undertaken and the corresponding trading volume. To that end, we propose to add the relevant flags to allow this possibility in the data referential reports made to ESMA under RTS 23, where not yet available, as per proposed in ESMA’s RTS 23 consultation paper.
* Additionally, to avoid gaming of the criteria, it is critical to ensure that sole technical “admission to trading” by secondary trading venues are not considered as “initial admission to trading”. Indeed, these technical admissions at the initiative of venue operators do not contribute to the financing of issuers and their inclusion in criteria 2 would contradict the objectives of Level 1 text.
* Finally, only volumes traded/reported in the EU should qualify for revenue share (i.e. no UK/US trading to be included)

The following operations should be considered as “initial admission to trading” under the following conditions:

|  |  |
| --- | --- |
| **Operations for SHARES** | **Conditions** |
| IPOs | On issuer request and new ISIN available and flag in RTS 23 |
| Private placements | On issuer request and new ISIN available and flag in RTS 23 |
| Direct listings | On issuer request and new ISIN available and flag in RTS 23 |
| M&A (including mergers, reverse mergers), spin-offs, business combinations (de-spacing) | New ISIN available *(one criterion only, as no issuer request is available for such corporate actions in RTS 23 /FIRDS).* |
| Cross-listings, dual listings | On issuer request and new ISIN available and flag in RTS 23 |
| Transfers | No new ISIN, at issuer request, change of trading venue segment MIC, for instance a company willing to transfer from the regulated market to a growth market |
| Secondary offerings\* | On issuer request *(which requires an additional field in ESMA RTS 23 for identification; there is no new ISIN)*  \*Secondary offerings play a central role in the financing of the real economy, with capital-raised volumes often surpassing those from IPOs. |

|  |  |
| --- | --- |
| **Operations for ETFs** | **Conditions** |
| Listing on a Regulated Market | On issuer request *(cross-listings are standard with ETFs, a new ISIN will not be available, while the decisive issue will be the issuer request)* |

<ESMA\_QUESTION\_CP2\_18>

**Q19: For the identification of the venue of first admission to trading, do you prefer option (A) use of FIRDS, option (B) the CTP collects the relevant information itself? Please explain and provide any alternative option you consider more appropriate.**

<ESMA\_QUESTION\_CP2\_19>

Euronext prefers option (A) use of FIRDS for the identification of the venue of first admission to trading. More specifically, we recommend that the relevant flags/fields to identify the venue of first admission to trading and the eligible operations are included in the data referential reports made to ESMA under RTS 23, where not yet available. Subsequently, these flags should be incorporated into FIRDS for the CTP to effectively identify them. This would streamline the process, leveraging an existing procedure like FIRDS rather than implementing a new one from scratch.

Regarding the identification of the venue of first admission to trading, we wish to reiterate the importance of clarifying in the RTS that the new field proposed in RTS 23 does not exclude cross-listings and dual-listings from qualifying for this criterion, as long as they are requested by the issuer and have a new ISIN. Cross-listings and dual-listings (at the issuer request) – not to be confused with sole technical “admission to trading” - constitute valuable operations of primary markets for capital-raising and increased liquidity and transparency in EU markets, aligning with Level 1 objectives.

<ESMA\_QUESTION\_CP2\_19>

**Q20: Do you agree that a flag indicating that the transaction was subject to an LIS waiver should be information to be sent to (but not published by) the CTP? If not, please explain.**

<ESMA\_QUESTION\_CP2\_20>

Yes, Euronext believes that a flag indicating that the transaction was subject to an LIS waiver should be information to be sent to the CTP:

* Euronext believes that the flag under RTS 1 should be further detailed and include a dedicated flag for transactions that have been subject to the LIS waiver. There is no reason not to inform market participants of such a flag: in itself the existence of the exemption from pre-trade transparency requirements under the LIS waiver already protects the corresponding orders from having a market impact and transactions executed under this waiver can also benefit from deferred publication. In parallel, market participants should have the means to monitor the type of trading activity, including via the accurate identification of pre-trade transparency waivers used, undertaken on EU markets.
* As such, we believe that (i) RTS 1 should be amended to ensure the uniform application of a new LIS flag, (ii) the information should be communicated to the CTP for the purpose of the computation of eligible volumes under criteria 3 and (iii) the information should equally be displayed in post-trade transparency publications from trading venues as well as in the data feeds of the CTP.
* In parallel, we believe that volumes considered as executed on pre-trade transparent venues that do not result from the interactions of pre-trade transparent buy- and sell-orders or indications of interests posted on the trading venues on which the volumes are finally executed but that result for instance from the execution of orders at a price pegged on the prices formed on another venue should be excluded from the computation of eligible volumes under criteria 3. These include volumes executed on periodic auction systems (also referred to as frequent batch auction) at prices pegged on an external venue (an issue extensively covered by ESMA in its 2019 Report on the topic (<https://www.esma.europa.eu/sites/default/files/library/esma70-156-1035_final_report_call_for_evidence_periodic_auctions.pdf> ). As such we believe the definition of trading systems in RTS 1 should be revised to ensure that trading venues which are considered as pre-trade transparent from a regulatory standpoint are in the way they operate and from a functional standpoint complying with the denomination attributed to them. This is key from a level playing field perspective.

<ESMA\_QUESTION\_CP2\_20>

**Q21: Could the determination of the pre-trade volume be done differently by the CTP (e.g. proxy this volume with the pre-trade data received) but at the same time sufficiently accurately? If yes, please explain.**

<ESMA\_QUESTION\_CP2\_21>

Yes, Euronext believes that the determination of pre-trade transparent volumes could and should be done differently by the CTP in a sufficiently accurate way:

* Euronext believes that the flag under RTS 1 should be further detailed and include a dedicated flag for transactions that have been subject to the LIS waiver. There is no reason not to inform market participants of such a flag: in itself the existence of the exemption from pre-trade transparency requirements under the LIS waiver already protects the corresponding orders from having a market impact and transactions executed under this waiver can also benefit from deferred publication. In parallel, market participants should have the means to monitor the type of trading activity, including via the accurate identification of pre-trade transparency waivers used, undertaken on EU markets.
* As such, we believe (i) RTS 1 should be amended to ensure the uniform application of a new LIS flag, (ii) the information should be communicated to the CTP for the purpose of the computation of eligible volumes under criteria 3 and (iii) the information should equally be displayed in post-trade transparency publications from trading venues as well as in the data feeds of the CTP.
* More generally, we believe that volumes considered as executed on pre-trade transparent venues that do not result from the interactions of pre-trade transparent buy- and sell-orders or indications of interests posted on the trading venues on which the volumes are finally executed, but that result for instance from the execution of orders at a price pegged on the prices formed on another venue should be excluded from the computation of eligible volumes under criteria 3. These include volumes executed on periodic auction systems at prices pegged on an external venue (an issue extensively covered by ESMA in its 2019 Report on the topic (<https://www.esma.europa.eu/sites/default/files/library/esma70-156-1035_final_report_call_for_evidence_periodic_auctions.pdf> ). As such we believe the definition of trading systems in RTS 1 should be revised to ensure that trading venues which are considered as pre-trade transparent from a regulatory standpoint are in the way they operate and from a functional standpoint complying with the denomination attributed to them. This is key from a level playing field perspective.

<ESMA\_QUESTION\_CP2\_21>

**Q22: Do you agree that the methodology to distribute the revenues should require the conversion of the values into percentages? If not, please explain.**

<ESMA\_QUESTION\_CP2\_22>

Yes, Euronext agrees that the methodology to distribute revenues should require the conversion of the value into percentages. Further, if the data pricing by the CT differs depending on the ISINs, the calculation for criteria 3 should be carried out at the level of each ISIN.

<ESMA\_QUESTION\_CP2\_22>

**Q23: Do you agree with the transactions to include and exclude for the determination of the volume for criteria #1 and #2? If not, please explain.**

<ESMA\_QUESTION\_CP2\_23>

No, Euronext does not fully agree with the transactions to include and exclude for the determination of the volumes in criteria #1 and #2. We suggest the below changes to ensure only the relevant transactions are included in the calculation.

In addition, we believe the list of eligible transactions for criteria 3 proposed by ESMA also requires adjustments.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Criteria 1 & 2 | | Criteria 3 | |
|  | ESMA proposal | Euronext response | ESMA proposal | Euronext response |
| all transactions with no flag as provided in Table 4 of Annex I of RTS 1 | included | Agree with ESMA proposal | included | Agree with ESMA proposal |
| non-price forming transactions flagged with (“NPFT”) | excluded | Agree with ESMA proposal | excluded | Agree with ESMA proposal |
| contingent transactions flagged with (“CONT”) | excluded | Agree with ESMA proposal | excluded | Agree with ESMA proposal |
| agency cross transactions flagged with (“ACTX”) | included | Agree with ESMA proposal | included | Agree with ESMA proposal |
| reference price transactions flagged with ("RFPT") | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | excluded | Agree with ESMA proposal |
| transactions in liquid financial instruments flagged with ("NLIQ") | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | excluded | Agree with ESMA proposal |
| negotiated transactions in illiquid financial instruments flagged with ("OILQ") | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | excluded | Agree with ESMA proposal |
| negotiated transactions subject to conditions other than the current market price flagged with ("PRIC") | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | excluded | Agree with ESMA proposal |
| transactions above the pre-trade LIS flagged with (“NTLS”) | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | excluded | Agree with ESMA proposal |
| benchmark transactions flagged with (“BENC”) | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | included | Do not agree, these transactions are not pre-trade transparent |
| portfolio transactions flagged with (“PORT”) | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | included | Do not agree, these transactions are not pre-trade transparent |
| special dividend transactions flagged with (“SDIV”) | included | Agree with ESMA proposal | included | Agree with ESMA proposal |
| post-trade large in scale transactions flagged with (“LRGS”) | included | Agree with ESMA proposal considering level 1, but we believe that these volumes should not be computed as they do not contribute to transparent markets and that level 1 should be reviewed to this end. | included | Agree with ESMA proposal considering level 1, but these volumes should not be retributed as they do not contribute to transparent markets |
| algorithmic transactions flagged with ("ALGO") | included | Agree with ESMA proposal | included | Agree with ESMA proposal |
| transactions above the standard market size flagged with ("SIZE") | included | Do not agree, these transactions are not executed on a trading venue | included | Do not agree, these transactions are not executed on a trading venue |
| illiquid instrument transactions flagged with ("ILQD") | included | Do not agree, these transactions are not executed on a trading venue | included | Do not agree, these transactions are not executed on a trading venue |
| Cancelled transactions with and without cancellation (“CANC”) flag | subtracted | Agree with ESMA proposal | subtracted | Agree with ESMA proposal |
| Amended transactions with amendment (“AMND”) flag | added | Agree with ESMA proposal | added | Agree with ESMA proposal |

Additional flags to be considered as well depending on changes to RTS 1:

* TNCP to be excluded as well – these transactions are not executed on a trading venue
* RPRI to be excluded as well – these transactions are not executed on a trading venue

In addition, it will also be critical to re-assess the list based on any potential review of RTS 1 flags as part of the RTS 1 review.

<ESMA\_QUESTION\_CP2\_23>

**Q24: What would be your view on the frequency of redistribution? Which issues do you foresee in the redistribution process? How could those issues be solved? Please explain.**

<ESMA\_QUESTION\_CP2\_24>

Euronext agrees with the approach proposed by ESMA, requiring distribution to be carried out at least on an annual basis.

As a general rule, we would underline that the frequency of redistribution and the way redistribution is carried out adequately takes into account the need for data contributors to have sufficient visibility of incoming revenues or lack thereof for general budgeting needs.

<ESMA\_QUESTION\_CP2\_24>

**Q25: Do you agree with the proposed timeline for the update of the list of data contributors and the identified issues? How could the issues be solved? Please explain.**

<ESMA\_QUESTION\_CP2\_25>

No, Euronext does not agree with the proposed approach, specifically regarding paragraph 125 of the consultation paper. The consultation underlines that it could be considered appropriate that new trading venues starting operations are not obliged to contribute for the first year of their “life” as long as they are not part of a group or have close links with an investment firm or a market operator recording more than 1% of the annual trading volume in the EU. We think there would be merit in ESMA further outlining the rationale for this, since such an approach does not treat actors equally. We believe it inappropriate to establish a regime for new trading venues starting operations which distinguishes between (i) those part of a larger group and (ii) others. We believe that not only would such an approach unlevel the playing field for new venues in the EU but once again will contradict one of the objectives underpinning the furthering of the Capital Markets Union relating to increased consolidation of EU markets.

<ESMA\_QUESTION\_CP2\_25>

**Q26: What would be your view on the issues for the first year of operations of the CTP? How could those issues be solved? Please explain.**

<ESMA\_QUESTION\_CP2\_26>

Euronext believes that the main critical point to reduce issues for the first year of operations of the CTP (as well as for data contributors) is to make sure the various parameters of the contributions are sufficiently clear well ahead of the launch of operations.

More specifically regarding revenue redistribution, Euronext believe that issues should be limited: it may indeed be relevant to introduce a transitional period to allow CTPs to take into account volumes executed over the transitional period and redistribute revenues based on these for its very first months of operations before the revenue distribution scheme can move to a standard process based on full calendar year.

<ESMA\_QUESTION\_CP2\_26>

**Q27: Do you agree with ESMA preferred proposal to set the weights of the revenue redistribution scheme to 4.5, 4.0 and 1.5 for the small trading venue criterion, the young instruments criterion and the transparent instruments criterion, respectively? If not, please explain.**

<ESMA\_QUESTION\_CP2\_27>

Yes, Euronext agrees with ESMA’s preferred proposal to set the weights of the revenue distribution scheme to 4.5, 4.0 and 1.5 for the small trading venue criterion, the young instruments criterion and the transparent instrument criterion, as long as the definition of these 3 criteria is sufficiently clear and based on the indicators highlighted in our previous responses. Euronext agrees with ESMA’s remark that the difference between criteria 1 and 2 should be minimised and that criteria 3 should be allocated a lesser weight, given the level 1 wording and objectives.

Yet we believe that the revenue distribution model need to be accompanied by an ad-hoc definition of Reasonable Commercial Basis requirements applicable to the CT in order for the whole economic model to work. Indeed, because the CTP will receive underlying core market data and regulatory data for free from data contributors, it will only incur a portion of the underlying production costs associated with production of the CTP. Hence **applying the same RCB framework to the CTP as the one applicable to other data providers**, i.e. applying the same cost definition and reasonable margin definition to the CTP as for other data providers, **would create a situation in which the CTP could price its products based on incomplete costs** (i.e. disregarding the production and dissemination costs incurred by data providers), de facto free riding on data contributors. This would lead to distortive price competition between the CTP and other data distributors. Even the most elaborate and detailed revenue share scheme will not be able to correct this conceptual flaw of the economic model, which, in turn, will lead to no meaningful revenue being redistributed to Regulated Markets (including European local primary and SME Growth markets).

We are therefore **calling on ESMA and NCAs to reflect on a construct whereby underlying costs incurred by data providers**, such as Euronext, for the production and transmission of data, **should be taken into account in applying RCB to the CTP**. Concretely, one approach could be: clarification that the costs to be taken into consideration by the CTP for RCB will include a portion of the underlying costs incurred by data providers for the production and transmission of core market data and regulatory data. Allocating a defined proportion of the data contributors’ costs would allow for a more subtle consideration of the landscape and the CT’s lifecycle bearing in mind that the CT is likely not to capture all potential client demand from day one and that the shift from feeds to CT use is likely to be progressive. Thus, it would make sense to define various progressive ratios of data providers’ costs starting at a relatively low percentage for year 1, which would be increased steadily in year 2 and again in year 3. Such an approach could provide for a more balanced approach overall all the while enabling a successful launch and uptake of the CT.

Such an approach would in our view constitute a balanced framework, unless the perimeter of the CT scope evolves in the future – in which case the percentage of data providers costs to be taken into account by the CT should be reviewed.

Another alternative to addressing the need for a dedicated RCB framework for the CTP could be to require that the CT generate extra margin for the purpose of redistributing revenue to the eligible contributors.

As an additional point, it is also important, that there be a revenue share for the bonds tape and that the RCB set-up in the case of the bonds tape include the revenue share to data providers.

An adequate compensation scheme is critical to have a comprehensive CT.

<ESMA\_QUESTION\_CP2\_27>

**Q28: Would you consider appropriate that the weight (percentages) sum to 10 (100%)? If not, please explain and provide your alternative proposal for the weights (percentages).**

<ESMA\_QUESTION\_CP2\_28>

Yes, Euronext considers it appropriate that the weight (percentages) sum to 10 (100%).

<ESMA\_QUESTION\_CP2\_28>

**Q29: Do you agree with the proposed (i) frequency of the determination of the weights (ii) timing of determination of the weights (iii) timing of application of the weights? If not, please explain.**

<ESMA\_QUESTION\_CP2\_29>

Yes, Euronext agrees with the proposed (i) frequency of the determination of the weights (ii) timing of determination of the weights (iii) timing of application of the weights.

<ESMA\_QUESTION\_CP2\_29>

**Q30: Do you agree with the proposed text? Have you identified any missing points or issues?**

<ESMA\_QUESTION\_CP2\_30>

We broadly support the text apart from the reservations and suggested changes referred to above in our answers to questions 17 to 29. In addition, we would like to underline the necessity of addressing two fundamental topics for the economic model of the CT to work.

* We ask that ESMA and NCAs reflect on a construct whereby underlying costs incurred by data contributors, such as Euronext for the production and transmission of data are taken into account in applying RCB to the CTP since the RCB framework was not conceived for a context where a CTP receives the data for free from data contributors. Please refer to our response to Q27 above for more details.
* A clear framework for value-added service provision should be clarified: the sole objective of the CT should remain clearly tied to the level 1 text, i.e. the provision of a pan-EU consolidated view of market data. This informational purpose is the sole reason data contributors are required to provide their data. From a competition standpoint, both the CT and its customers should refrain from offering value-added services based on the CT. However, the draft RTS have not clarified the permissible use cases for the CTP and appear to leave open the possibility of provisions of value-added services. If this is to be the case, appropriate additional measures must be taken to address several competition issues that would disadvantage market data vendors and data contributors.
  + The CT must establish a separate legal entity operating on an arms-length basis for providing such value-added services to prevent further competition distortion with market data vendors. Strict supervisory measures must be enforced to ensure the new entity does not benefit from its association with the CT (e.g., robust conflict of interest provisions).
  + The CTP (or its separate legal entity) and other data vendors providing value-added services should be subject to additional licensing agreements with each data contributor. This would help mitigate (though not eliminate) the significant risk of substitution for exchange data products, prompted by the pan-European CTP’s lower fees due to its privileged, access to data for consolidation as outlined in the MiFIR text.
  + At a minimum, the CTP must distribute back to the contributors a fair share of the revenues generated from licensing data to data vendors and other potential users, including its separate legal entity, which will offer these value-added services. If there is no entity separation, this share should also include a portion of the revenues generated by the CTP’s own value-added services.

<ESMA\_QUESTION\_CP2\_30>

**Q31: Do you agree with ESMA’s proposal on the criteria for a potential suspension of redistribution in case of serious and repeated breach by the CTP? If not, which alternative or/and additional criteria would you consider relevant?**

<ESMA\_QUESTION\_CP2\_31>

No, Euronext does not agree with ESMA’s proposal on the criteria for potential suspension of redistribution in case of serious and repeated breach by the CTP.

As a general point, it is possible, when reflecting on this area to draw a parallel with gradual approaches currently in place today when an issue linked to reporting or transmission of data may arise: if some issue is observed the first immediate step is notification followed by communication around elements that would need to be improved which then leads to corrections being put in place. It is important to be realistic in the understanding that one issue or successive technical issues do not constitute a breach. A succession of isolated and unrelated technical issues leading to erroneous feeds should not immediately lead to any suspension of remuneration. Instead, dialogue should be prioritised in order to alert and agree on how the necessary corrections can be made and in which time frame. This dialogue and pragmatic approach will be essential in the early stages of the creation of the CTP in order to achieve the desired aim and adequately take into account the fact that some initial difficulties will occur and that it is how these can be corrected which is important.

As a result, Euronext suggests the below process be integrated into Article 7 and 8 of the draft RTS:

1. The most important when these occur is that a Review Committee to review quality be constituted so that it is possible to have a practical discussion on how the issues can be corrected. In the case of the CTP, such a Review Committee should consist of representatives of the CTP, ESMA and include representatives of the data contributor with whom an issue has been detected. Its role should consist in extensively assessing and discussing the issue, discuss relevant mitigations and solutions, provide a minimum 3 week timeframe for the data contributor to provide evidence of non-breach and if required define the relevant timeframe to solve it, with a minimum 3 week timeframe. Any penalties or suspension of remuneration should only be decided by ESMA after a failure from the data contributor to correct the issue in the above defined allocated time frame. To this end, the wording of Article 7.2 of the draft RTS should be amended to suppress “in particular”.
2. Regarding the penalties or suspension calculation. Euronext suggests these should be based on the below
   * the CTP would maintain records of erroneous feeds (assessed against timeliness, quality, format and substance of data standards) transmitted by data providers
   * the volumes corresponding to the erroneous feeds from provider A (volumes A) should be covered by an extra weight depending on the scale of the breach:
     + weight should be 1 if during a calendar year provider A transmitted 20 to 50 erroneous feeds
     + weight should be 1,1 from 51 to 150 breaches
     + weight should be 1,5 from 151 to 500 breaches
     + Etc.
   * The yearly volumes from contributor A computed for the purpose of the revenue distribution under each of the 3 distribution criteria should substract the weighted erroneous volumes (volumes A).
3. In addition, Euronext believes that the draft Article 8 should also include a possibility for the data contributor subject to the above penalty and suspension for a recourse towards ESMA.

Even if the level 1 text does not provide specific provisions in this regard, Euronext believes that in addition to the direct incentives given to data contributors, providers eligible to the revenue distribution scheme to contribute to the CTP with the required data quality, other data contributors (such as APAs) should equally be incentivized to do so, via (i) the leveraging of the same data quality verification mechanism that the one the CTP will use for data provided by contributors eligible to the revenue distribution scheme and (ii) an ad-hoc sanction regime in cases of repeated breach. This would be critical to ensure the accuracy of the CTP data, including those transmitted by contributors falling outside of the distribution scheme.

<ESMA\_QUESTION\_CP2\_31>

**Q32: Do you agree with ESMA’s proposal on the procedure for the suspension and the resumption of redistribution? If not, which alternative approach would you consider suitable?**

<ESMA\_QUESTION\_CP2\_32>

No, as per our response to question 31 Euronext does not agree with ESMA’s proposal on the procedure for the suspension, as it notably omits to define the suspension period.

As a general point, it is possible, when reflecting on this area to draw a parallel with gradual approaches currently in place today when an issue linked to reporting or transmission of data may arise: if some issue is observed the first immediate step is notification followed by communication around elements that would need to be improved which then leads to corrections being put in place. It is important to be realistic in the understanding that one issue or successive technical issues do not constitute a breach. A succession of isolated and unrelated technical issues leading to erroneous feeds should not immediately lead to any suspension of remuneration. Instead, dialogue should be prioritised in order to alert and agree on how the necessary corrections can be made an in which time frame. This dialogue and pragmatic approach will be essential in the early stages of the creation of the CTP in order to achieve the desired aim and adequately take into account the fact that some initial difficulties will occur and that it is how these can be corrected which is important.

Euronext suggests the below process be integrated into Article 7 and 8 of the draft RTS:

1. The most important when these occur is that a Review Committee to review quality be constituted so that it is possible to have a practical discussion on how the issues can be corrected. In the case of the CTP, such a Review Committee should consist of representatives of the CTP, ESMA and include representatives of the data contributor with whom an issue has been detected. Its role should consist in extensively assessing and discussing the issue, discuss relevant mitigations and solutions, provide a minimum 3 week timeframe for the data contributor to provide evidence of non-breach and if required define the relevant timeframe to solve it, with a minimum 3 week timeframe. Any penalties or suspension of remuneration should only be decided by ESMA after a failure from the data contributor to correct the issue in the above defined allocated time frame. To this end, the wording of Article 7.2 of the draft RTS should be amended to suppress “in particular”.
2. Regarding the penalties or suspension calculation. Euronext suggests these should be based on the below
   * the CTP would maintain records of erroneous feeds (assessed against timeliness, quality, format and substance of data standards) transmitted by data providers
   * the volumes corresponding to the erroneous feeds from provider A (volumes A) should be covered by an extra weight depending on the scale of the breach:
     + weight should be 1 if during a calendar year provider A transmitted 20 to 50 erroneous feeds
     + weight should be 1,1 from 51 to 150 breaches
     + weight should be 1,5 from 151 to 500 breaches
     + Etc.
   * The yearly volumes from contributor A computed for the purpose of the revenue distribution under each of the 3 distribution criteria should subtract the weighted erroneous volumes (volumes A).
3. In addition, Euronext believes that the draft Article 8 should also include a possibility for the data contributor subject to the above penalty and suspension for a recourse towards ESMA.

Even if the level 1 text does not provide specific provisions in this regard, Euronext believes that in addition to the direct incentivizes given to data contributors providers eligible to the revenue distribution scheme to contribute to the CTP with the required data quality, other data contributors (such as APAs) should equally be incentivized to do so, via (i) the leveraging of the same data quality verification mechanism that the one the CTP will use for data provided by contributors eligible to the revenue distribution scheme and (ii) an ad-hoc sanction regime in cases of repeated breach. This would be critical to ensure the accuracy of the CTP data, including those transmitted by contributors falling outside of the distribution scheme.

<ESMA\_QUESTION\_CP2\_32>

**Q33: Do you agree with ESMA’s proposal on the timing of the procedure for the suspension and the resumption of redistribution? If not, which alternative approach would you consider suitable?**

<ESMA\_QUESTION\_CP2\_33>

No, as per our response to question 31, Euronext does not agree with ESMA’s proposal on the procedure for the suspension, as it questions the general approach taken by ESMA.

As a general point, it is possible, when reflecting on this area to draw a parallel with gradual approaches currently in place today when an issue linked to reporting or transmission of data may arise: if some issue is observed the first immediate step is notification followed by communication around elements that would need to be improved which then leads to corrections being put in place. It is important to be realistic in the understanding that one issue or successive technical issues do not constitute a breach. A succession of isolated and unrelated technical issues leading to erroneous feeds should not immediately lead to any suspension of remuneration. Instead, dialogue should be prioritised in order to alert and agree on how the necessary corrections can be made an in which time frame. This dialogue and pragmatic approach will be essential in the early stages of the creation of the CTP in order to achieve the desired aim and adequately take into account the fact that some initial difficulties will occur and that it is how these can be corrected which is important.

Euronext suggests the below process be integrated into Article 7 and 8 of the draft RTS:

1. The most important when these occur is that a Review Committee to review quality be constituted so that it is possible to have a practical discussion on how the issues can be corrected. In the case of the CTP, such a Review Committee should consist of representatives of the CTP, ESMA and include representatives of the data contributor with whom an issue has been detected. Its role should consist in extensively assessing and discussing the issue, discuss relevant mitigations and solutions, provide a minimum 3 week timeframe for the data contributor to provide evidence of non-breach and if required define the relevant timeframe to solve it, with a minimum 3 week timeframe. Any penalties or suspension of remuneration should only be decided by ESMA after a failure from the data contributor to correct the issue in the above defined allocated time frame. To this end, the wording of Article 7.2 of the draft RTS should be amended to suppress “in particular”.
2. Regarding the penalties or suspension calculation. Euronext suggests these should be based on the below
   * the CTP would maintain records of erroneous feeds (assessed against timeliness, quality, format and substance of data standards) transmitted by data providers
   * the volumes corresponding to the erroneous feeds from provider A (volumes A) should be covered by an extra weight depending on the scale of the breach:
     + weight should be 1 if during a calendar year provider A transmitted 20 to 50 erroneous feeds
     + weight should be 1,1 from 51 to 150 breaches
     + weight should be 1,5 from 151 to 500 breaches
     + Etc.
   * The yearly volumes from contributor A computed for the purpose of the revenue distribution under each of the 3 distribution criteria should substract the weighted erroneous volumes (volumes A).
3. In addition, Euronext believes that the draft Article 8 should also include a possibility for the data contributor subject to the above penalty and suspension for a recourse towards ESMA.

Even if the level 1 text does not provide specific provisions in this regard, Euronext believes that in addition to the direct incentivizes given to data contributors providers eligible to the revenue distribution scheme to contribute to the CTP with the required data quality, other data contributors (such as APAs) should equally be incentivized to do so, via (i) the leveraging of the same data quality verification mechanism that the one the CTP will use for data provided by contributors eligible to the revenue distribution scheme and (ii) an ad-hoc sanction regime in cases of repeated breach. This would be critical to ensure the accuracy of the CTP data, including those transmitted by contributors falling outside of the distribution scheme.

<ESMA\_QUESTION\_CP2\_33>

**Q34: Do you agree with ESMA’s proposal regarding a one-week timeframe for data contributors to furnish evidence of non-breaches? If you disagree, could you suggest an alternative approach that you find appropriate?**

<ESMA\_QUESTION\_CP2\_34>

No, Euronext does not agree with ESMA’s proposal. Euronext also believes that the timeframe approach whereby data contributors should provide evidence of no breach for the CTP to re-assess its decision is not the right approach. Please also see responses to questions above.

<ESMA\_QUESTION\_CP2\_34>

**Q35: Do you agree with ESMA’s expectation on the notification to be made by the CTP to the competent authority of the data contributor once a suspension has been triggered?**

<ESMA\_QUESTION\_CP2\_35>

Yes, Euronext partially agrees with ESMA’s expectation on the notification to be made by the CTP however Euronext questions ESMA’s overall approach and would draw attention to proposals made in responses 31 to 34.

<ESMA\_QUESTION\_CP2\_35>

**Q36: Do you agree with ESMA’s proposal on the approach to the retained revenue? In your view, which rate should apply to compound the interest on retained revenue?**

<ESMA\_QUESTION\_CP2\_36>

Yes, Euronext agrees with ESMA’s proposal on the approach to the retained revenue.

Even if the level 1 text does not provide specific provisions in this regard, Euronext believes that in addition to the direct incentivizes given to data contributors eligible to the revenue distribution scheme to contribute to the CTP with the required data quality, other data contributors (such as APAs) should equally be incentivized to do so, via (i) the leveraging of the same data quality verification mechanism that the one the CTP will use for data provided by contributors eligible to the revenue distribution scheme and (ii) an ad-hoc sanction regime in cases of repeated breach. This would be critical to ensure the accuracy of the CTP data, including those transmitted by contributors falling outside of the distribution scheme.

<ESMA\_QUESTION\_CP2\_36>

Section 5 – RTS on the synchronisation of business clocks

**Q37: Do you agree with the proposed approach on synchronisation to reference time? If not, please explain.**

<ESMA\_QUESTION\_CP2\_37>

Yes, Euronext agrees with the proposed approach on synchronisation to reference time.

<ESMA\_QUESTION\_CP2\_37>

**Q38: Do you support a timestamp granularity of 0.1 microseconds for operators of trading venues whose gateway-to-gateway latency is smaller than 1 millisecond? If not, please explain. Would you argue for an even smaller granularity? If yes, please explain.**

<ESMA\_QUESTION\_CP2\_38>

No, Euronext does not support a timestamp granularity of 0.1 microseconds for operators of trading venues whose gateway-to-gateway latency is smaller than 1 millisecond. We believe a timestamp granularity of 1 microsecond is the right level for this type of traffic.

1. Indeed, 2 events taking place within one microsecond in two different trading venues are un-distinguishable from a CTP perspective.
2. Yet timestamp granularity should not be the only focus for the purpose of providing relevant information: the correct sequencing should also be required. Typically, another issue the question of how to distinguish between two events happening within the same microsecond on the same instrument in the same trading venue. Addressing this requires at trading venue level to publish events in the correct sequence (possibly by setting some sequence rank identification which is not necessarily a timestamp precision). Yet, it is important to note that correct sequencing of different events happening at different trading venues for the same instrument will be by nature not possible.

<ESMA\_QUESTION\_CP2\_38>

**Q39: Do you support the proposed approach on the level of accuracy for trading venue members, participants or users? If not, please explain.**

<ESMA\_QUESTION\_CP2\_39>

No, Euronext does not support the proposed approach on the level of accuracy for trading venue members, participants or users. A displayed precision level of 1µs is possible, but the actual observed precision will be closer to the millisecond.

<ESMA\_QUESTION\_CP2\_39>

**Q40: Do you agree with the proposed approach on traceability to UTC? If not, please explain.**

<ESMA\_QUESTION\_CP2\_40>

Yes, Euronext agrees with the proposed approach on traceability to UTC

<ESMA\_QUESTION\_CP2\_40>

**Q41: Do you agree with the proposed accuracy levels for APAs, SIs, DPEs and CTPs? If not, please explain.**

<ESMA\_QUESTION\_CP2\_41>

No, Euronext does not fully agree with the proposed accuracy levels for APAs, SIs, DPEs and CTP. SI requirements should be aligned with those applicable to trading venues, as de facto they conduct functionally a very similar business so similar rules should apply so as not to offer SIs a competitive advantage. SIs are not bespoke platforms operated by small players for sporadic trading and are indeed considered eligible execution venues under the Share Trading Obligation. The largest SIs have attained sizes comparable to that of trading venues. Therefore, it is important to ensure as much as possible the correct accuracy level for SIs.

<ESMA\_QUESTION\_CP2\_41>

**Q42: Do you think that more stringent requirements should be set for SIs compared to DPEs considering they have pre-trade transparency obligations? If not, please explain.**

<ESMA\_QUESTION\_CP2\_42>

Yes, Euronext agrees that more stringent requirements should be set for SIs compared to DPEs. SI requirements should be aligned with those applicable to trading venues, as largest SIs have attained sizes comparable to that of trading venues. Indeed, statistics show that systematic internalisers account for 13% of average value traded in European equities in June 2024 (source: BigXYT, June 2024).

<ESMA\_QUESTION\_CP2\_42>

Section 6 – RTS/ITS on the authorisation and organisational requirements for DRSPs

**Q43: Do you agree with the approach proposed by ESMA?**

<ESMA\_QUESTION\_CP2\_43>

No response.

<ESMA\_QUESTION\_CP2\_43>

**Q44: Do you agree to include new authorisation provisions on ownership structure and internal controls for APAs and ARMs?**

<ESMA\_QUESTION\_CP2\_44>

No response.

<ESMA\_QUESTION\_CP2\_44>

**Q45: Do you have any further comments or suggestions on the draft RTS? Please elaborate your answer.**

<ESMA\_QUESTION\_CP2\_45>

No response.

<ESMA\_QUESTION\_CP2\_45>

**Q46: Do you agree with the approach proposed by ESMA?**

<ESMA\_QUESTION\_CP2\_46>

Yes, Euronext agrees with the approach. In particular we support the objective to align the CTP authorisation with that of other financial service providers regulated in the EU. We believe that there would be merit in aligning the information on ownership in the Article 2 of the draft RTS with that applicable to service providers the EU. ESMA currently in Article 2 of the draft RTS to ESMA of shareholders holding above 5% of capital or voting rights of the CTP candidates, whilst this threshold is set at 10% for investment firms seeking authorisation in the EU. The CTP regime should be aligned with that for investment firms in this area.

<ESMA\_QUESTION\_CP2\_46>

**Q47: Do you foresee specific conflicts of interests that may arise between (i) CTP and data contributors and (ii) CTP and clients and users?**

<ESMA\_QUESTION\_CP2\_47>

Yes, Euronext foresees specific conflicts of interests that may arise notably between the CTP clients and users. These should be correctly identified by applicants ex-ante and accompanied with relevant prevention mechanism, monitoring mechanisms and remedials. Some possible conflicts of interest (non-exhaustive) could include;

* Typically, players whose core business is either to operate non-transparent trading venues (such as dark MTFs) and/ or to trade on own account on these and/ or to route client order may have conflicting interests to that of the CTP, which is to provide more transparency on EU securities markets. On the other hand, these stakeholders also have an interest in importing the prices formed by other players at low cost to conduct their own business – so the CTP may also be of interest to them in this respect.
* More generally trading participants which will be amongst the primary users of the tape may also have conflicts if applying to operate the tape, as individual business performance (e.g. the quality of execution they provide to their clients) will be assessed against the CT.

<ESMA\_QUESTION\_CP2\_47>

**Q48: What other elements, if any, should be included in the RTS on authorisation of CTPs?**

<ESMA\_QUESTION\_CP2\_48>

Euronext believes that the RTS on authorization of CTPs are exhaustive, pending:

* The amendment of Article 10 on Market data fees and licensing models, which on top of referring to the RTS on RCB which extensively covers the licensing policies of the CTP towards users, should also include a dedicated section on the need for the CTP to put in place and provide ESMA information on their licensing models vis à vis data contributors. Licensing policies should notably (i) for licensing between the CTP and end clients specify the authorizations regarding uses allocated to users and (ii) for licensing between the CTP and data contributors allowing the CTP to use the data transmitted by data contributors for the purpose of providing a CT.

<ESMA\_QUESTION\_CP2\_48>

**Q49: What other elements, if any, should be included in the RTS on authorisation of CTPs?**

<ESMA\_QUESTION\_CP2\_49>

No response

<ESMA\_QUESTION\_CP2\_49>

Section 7 – Criteria to assess CTP applicants

**Q50: How would you define retail investors, academics and civil society organisations for the purpose of the CTP?**

<ESMA\_QUESTION\_CP2\_50>

Euronext believe that properly defining these three stakeholder categories is critical in the context of the CTP and recommends the below definitions:

* A retail investor should be defined as a natural person who accesses/ consumes consolidated core market data and/ or regulated data for its own personal consumption, and not for commercial or industrial purposes. Indeed, we propose to define retail in an ad-hoc manner in the context of the CTP versus other financial services.in contrast to the definition of retail in the context of investment services, whereby retail is defined broadly in order to allow an extra layer of protection to less sophisticated investors, including corporations, here the purpose of the retail definition in the context of the CTP is to allow free access to the CTP product. As such, the definition should be limited to retail in the strict and common-sense definition, to make sure the objective is achieved without undermining the commercial model of the CTP. In other words, the retail definition should strictly exclude professional corporate users.
* Civil society organisations should be defined in accordance with the Treaty on the Functioning of the European Union, as per <https://eur-lex.europa.eu/EN/legal-content/glossary/civil-society-organisation.html#:~:text=Civil%20society%20refers%20to%20all,nor%20managed%20by%20state%20authorities>, who accesses/consumes consolidated core market data/ and or regulated data for the sole purpose of its civil society activities which cannot be directly or indirectly commercial nor business related. (as per recital 28, MiFIR 2024). This last point is critical in order to avoid any potential loophole which would undermine the CTP commercial model.
* Academic should be defined as a natural person member or teacher in a university or college or as a university or college institution who accesses/ consumes consolidated core market data and/ or regulated data for the sole purpose of academic research, so excluding paid consulting work and excluding any other direct or indirect commercial or business-related activity (as per recital 28, MiFIR 2024). This last point is critical in order to avoid any potential loophole which would undermine the CTP commercial model.

<ESMA\_QUESTION\_CP2\_50>

**Q51: What are in your view the most important elements that should be taken into account when defining the governance structure of the CTP?**

<ESMA\_QUESTION\_CP2\_51>

Euronext believes it critical for the governance to ensure the CTP’s team and governing bodies have the right degree of expertise to provide for the CT, primarily. In addition, it should ensure that market stakeholder at large (and not only participants as per paragraph 253) are duly represented in the CT Advisory Committee, i.e. including trading market participants but also data contributors at the very least.

<ESMA\_QUESTION\_CP2\_51>

**Q52: Should the CTP include representation of other stakeholders within their governance structure?**

<ESMA\_QUESTION\_CP2\_52>

Yes, Euronext believes that the CTP should include representation of other stakeholders within their governance structure, including data contributors.

<ESMA\_QUESTION\_CP2\_52>

**Q53: Do you agree with the proposed approach on the assessment of necessity of joint application?**

<ESMA\_QUESTION\_CP2\_53>

We acknowledge the presence of several consortia who have announced that they will apply as CTP applicants, either or not through a dedicated legal entity, aiming to maximise the opportunities associated with the tender. Regarding this matter, Euronext would like to refer to the responses submitted by these CTP applicants to the consultation.

<ESMA\_QUESTION\_CP2\_53>

**Q54: Which minimum requirements on identifying and addressing potential conflicts of interest would you consider relevant?**

<ESMA\_QUESTION\_CP2\_54>

Conflicts of interests may indeed arise in many potential set-ups and not only in joint applications, so it is critical for ESMA to identify all of these ex-ante and to assess applicants in light of the measures they intend to put in place to prevent and/or manage those.

<ESMA\_QUESTION\_CP2\_54>

**Q55: To score the applicants on their development expenditure and operating costs, ESMA intends to look at the costs the applicant will need to cover on an annual basis. Do you agree with this approach? If not, which alternative approach would you deem more appropriate?**

<ESMA\_QUESTION\_CP2\_55>

No, Euronext does not fully agree with this approach. As a general comment, we concur with ESMA on the need to assess criterion (g) in conjunction with other criteria. Criterion (g) should not be looked at in isolation. Indeed, the total expenditure and ongoing costs for operating the CTP are strongly linked to the overall quality of the CTP configuration and set-up. The CP refers to the governance requirements [criterion (b)], but this relates to other criteria as well.

In our opinion, the primary focus of any CTP applicant must be to deliver a successful solution. This requires a robust technical setup, and the total expenditure will increase depending on the quality of this setup, as well as regulatory requirements (e.g., DORA), data volumes to process, and additional requirements for the provision of data by the CTP. Ultimately, only a well-constructed CTP will be able to provide reliable services and play a part in furthering the CMU. We therefore strongly recommend that these elements, encompassed by different ‘selection’ and ‘award’ criteria, are taken into account to put criterion (g) into perspective in the second phase of the competitive procedure.

On a related note, we noted that Article 27(da)(2) does not mention the ‘revenue share for contributors’, but we would encourage ESMA to examine and factor in related provisions when selecting the CTP provider. This becomes even more critical in the potential event of a race to the bottom in the level of fees among CT bidders, which could lead to insufficient funding for the CT operator and no revenue allocation to data contributors which would compound already significant revenue loss. Therefore, it is essential to consider the amount of revenue available for the revenue-sharing scheme after the deduction of operating costs and a reasonable margin. Insufficient revenue for these purposes should be considered a drawback for any bid. To ensure a sufficient revenue share, we propose integrating revenue distribution as a key component of the cost. Alternatively, it would need to be deducted from the CTP margin.

<ESMA\_QUESTION\_CP2\_55>

**Q56: The simplicity of the fee structure and licensing models can be scored by taking into account the number of tiers, fee types and licensing models. Does this accurately reflect simplicity? If not, would you propose a different approach to assess simplicity? Please elaborate.**

<ESMA\_QUESTION\_CP2\_56>

We caution against prioritising criterion (h) as a decisive ‘award’ factor. This could notably trigger a race to the bottom in the level of fees among CT bidders, potentially resulting in insufficient funding for the CTP, reduced investment in the quality and robustness of the required infrastructure, and ultimately, no or too little revenues being allocated to data contributors. That being said, we hope that ESMA’s proposed two-fold assessment will prevent such a scenario. Similarly to criterion (g) [see response to Q51], we welcome ESMA’s consideration of criterion (h) in conjunction with other criteria.

Expanding on the above, we would be particularly concerned if the actual ‘level of fees’ were considered a decisive element within this criterion:

* The revenues generated, based on costs and considering the fees charged by the CTP to data users, should ensure sufficient funds for the state-of-the-art operation of the CT. It should be noted that a group of data users will already have free access to data. The CTP must have the capability to make necessary investments for reliable operation and long-term success of the CT, to the ultimate benefit of its customers.
* Setting fees too low could prevent fair compensation to data contributors, exacerbating their already significant revenue losses.
* Furthermore, it should be noted that unlike the US CT, consumption of the equity CT will not be mandatory under the proposed Regulation, which may introduce revenue volatility and unpredictability for the CTP’s revenue overall.

<ESMA\_QUESTION\_CP2\_56>

**Q57: The approach proposed for the assessment of the ability of CTP applicants to process data is grounded on the assessment of the technological infrastructure in ensuring scalability, low-latency, accuracy and security throughout the data lifecycle. Do you agree with this approach, or would you consider additional elements to be assessed?**

<ESMA\_QUESTION\_CP2\_57>

This is the core criteria: without it, there will not be any tape, it should be considered as an exclusion criterion.

<ESMA\_QUESTION\_CP2\_57>

**Q58: Which is the minimum speed of dissemination you would consider appropriate for the CTP? Please distinguish between asset classes (and for the case of the equity CTP, between pre- and post-trade date).**

<ESMA\_QUESTION\_CP2\_58>

We fully concur with ESMA on the significance of assessing this criterion in conjunction with data quality considerations. It will be important to allow sufficient time for the CTP to properly sequence incoming best bids and ask prices. In particular, the CTP should be required to wait for all contributor’s BBO feed before sequencing the data and deriving the EBBO. This is fundamental and would help avoid misinformation caused by latency lags and improve the overall data quality of the CTP. In this context it can be counter-effective to the overall success of the CT to seek a specific minimum speed of dissemination estimate at this stage beyond what is already contained in the Level 1.

* The right sequencing of BBO orders is critical to the accuracy of the information displayed by the CTP. The most orderly way to convey aggregated information on BBO to market participants will be to require the CTP to re-order BBO based on the order entry timestamp.
* In contrast, not requiring re-ordering messages would convey a fallacious representation of the BBO reality across European markets as: (i) the quality of the data will be highly dependent on the latency variability introduced by the network and geographical distances, (ii) it will provide a view of the EBBO as perceived from the location of the CTP data centers and (iii) it will create an unfair competitive advantage for data contributors located closer to the CTP data centers as their BBO will reach the CTP first with more chance to set the EBBO. This is because, in contrast to the US, where trading venues are located within a 65 km triangle, European data contributors are very dispersed geographically: the average and median distances between the 5 main trading datacenters is 1300 km.
* Even if the BBO input data is transmitted with a very low latency, if the BBO data input received by the CTP is not re-ordered by the CTP in accordance with the order entry timestamp as per RTS 24 definition and as per field #1 “submission date and time” of Table 1b Annex RTS 1 proposed in ESMA’s Consultation paper – Reference: ESMA74-2134169708-7011, the BBO data output of the CTP will give a false view of BBO reality across European markets. Taking the example of a Swedish stock, and imagining that the CTP is located in Frankfurt, if BBO input data are not re-ordered by the CT, and orders executed at the very same time on two different markets, one in London and one in Stockholm, the CT will mechanically be able to receive and publish the BBO data from data contributors which datacenters are located in London 2 times faster than the BBO data from data contributors which datacenters are located in Stockholm. Hence the BBO data published by the CTP will be erroneous and misleading. BBO re-ordering by the CT to make sure all BBO are ordered in accordance with the order timestamp is critical and should be deemed a priority. From a cost perspective will not increase investment or run costs for the CTP versus an absence of re-ordering.
* The incoming RTS 1 should also clarify precisely the definition of the publication timestamp for orders.

<ESMA\_QUESTION\_CP2\_58>

**Q59: The proposed approach to data quality would reward additional commitments and measures that CTP applicants intend to put in place. Do you agree with this approach ? What additional commitments and measures would you consider appropriate?**

<ESMA\_QUESTION\_CP2\_59>

Minimum requirements are sufficiently high. It does not seem necessary to provide for a mechanism that would encourage CTP applicants to put in place additional commitments.

<ESMA\_QUESTION\_CP2\_59>

**Q60: The proposed approach to modern interface and connectivity is grounded on the assessment of the interface technology in terms of reliability, scalability, low latency and security. Do you agree with this approach, or would you consider additional elements to be assessed?**

<ESMA\_QUESTION\_CP2\_60>

Yes, we generally agree.

<ESMA\_QUESTION\_CP2\_60>

**Q61: Do you agree with the proposed approach to record keeping, based on the provision of document supporting intended compliance?**

<ESMA\_QUESTION\_CP2\_61>

Yes, we generally agree.

<ESMA\_QUESTION\_CP2\_61>

**Q62: The proposed approach to resilience, business continuity and cyber risks is grounded in assessing mandatory DORA requirements applicable to CTPs as a first step (selection criterion), to then reward additional commitments and measures CTPs applicants intended to put in place to mitigate and address outages and cyber-risk . Do you agree with this approach? What additional commitments and measures would you consider appropriate?**

<ESMA\_QUESTION\_CP2\_62>

All three should be selection criteria, as these are pivotal to have an up and running and reliable CT.

<ESMA\_QUESTION\_CP2\_62>

**Q63: Do you agree with the use of the Power Utilisation Effectiveness (PUE) as the metric to assess the energy consumption of the CTP? If not, which alternative approach would you favour?**

<ESMA\_QUESTION\_CP2\_63>

Euronext agrees that this is an important area.

<ESMA\_QUESTION\_CP2\_63>

Annex II – Cost Benefit Analysis:

**Q64: What costs do you expect in order to comply with the proposed minimum requirements for the quality of transmission protocols? What benefits do you expect? Please indicate to what role (data contributor, CTP, or CT user) your response refers.**

<ESMA\_QUESTION\_CP2\_64>

Euronext believes that the costs-benefit analysis should indeed take into account direct costs associated with the requirements as well as the indirect costs for the industry.

* Indirect costs
  + The CT will be a direct competitor to the data contributors who will transmit to it their data for free. Depending on the Consolidated Tape commercial model, there is an important risk that the CT will lead to very material revenue loss on the data contributor side, without any significant gain in terms of cost savings on the clients side, as most clients are likely to remain intermediated by data redistributors for the consumption of market data, whilst these same data redistributors are not constrained by any Reasonable Commercial Basis Requirement. The risk to data contributor revenues is further increased by the fact that the revenue distribution scheme does not in itself include incentives for the CT to generate sufficient extra revenue (or extra margin) to redistribute to the data contributors. De facto, it would more economically rational for a CTP to maximize their costs under the RCB requirements rather than generate margins to be given back to data contributors.
  + In addition, the CT risks accelerating the attrition of trading volumes executed on pre-trade transparent markets, as it will provide a benchmark price against which less sophisticated investors will be executed, either on dark pools or on systematic internalisers. This is also illustrated by the situation in the US where there is no longer retail flow on lit and multilateral venues, which has translated in a fundamental transformation of the equity market structure (i.e. turning increasingly to dark bilateral trading).
* Direct costs:
  + Now focusing on direct costs, as data contributor, based on the proposed minimum requirements with the following assumptions:
    - Latency constraints understood as median
    - CTP located in many data centers in Europe
    - CTP is offering capacity to connect network carrier lines directly to their network equipment (ie. No Euronext network device required at CTP DC location).
    - Bonds and Equity CTP Sharing the same protocol (including cinematics and rejection mechanism)
    - Data transmitted in efficient manner (binary format, limited to BBO1 for pre-trade)
  + Whilst we are keen to provide general orders of magnitude to inform the discussion on this point, Set-up and run costs are hard to sized due to number of unknowns (operational need for monitoring and managing data quality rejection). In addition, set-up and run costs highlighted here are immaterial versus the loss of revenues for data contributors due to the Consolidated Tape competing with their own commercial offering based on the reception for free of the data they usually commercialise.
    - Estimated set-up costs for Euronext as a data contributor: from our experience of past projects, we have estimated initial set-up costs to be contained within a range of 1 to 2M€. This estimate covers both Bond and Equity scopes.
    - Estimated annual run costs for Euronext as a data contributor:We estimate run cost to be in the range of 1 M€/year, including network connectivity, maintenance, monitoring and administrative costs.

As such, we strongly encourage ESMA (i) to indeed monitor very closely the full costs and benefits associated with the CT in order to implement remedies where need be and (ii) provide as from the very start of the CT operation a viable economic model for both the CT and data contributors through the appropriate definition of the Reasonable Commercial Basis framework in the context of the CT (as per our response to Q27).

<ESMA\_QUESTION\_CP2\_64>

**Q65: What costs do you expect in order to comply with the proposed data format for input and output data? What benefits do you expect? Please indicate to what role (data contributor, CTP, CT user) your response refers.**

<ESMA\_QUESTION\_CP2\_65>

Euronext believes that the costs-benefit analysis should indeed take into account direct costs associated with the requirements as well as the indirect costs for the industry.

* Indirect costs
  + The CT will be a direct competitor to the data contributors who will transmit to it their data for free. Depending on the Consolidated Tape commercial model, there is an important risk that the CT will lead to very material revenue loss on the data contributor side, without any significant gain in terms of cost savings on the clients side, as most clients are likely to remain intermediated by data redistributors for the consumption of market data, whilst these same data redistributors are not constrained by any Reasonable Commercial Basis Requirement. The risk to data contributor revenues is further increased by the fact that the revenue distribution scheme does not in itself include incentives for the CT to generate sufficient extra revenue (or extra margin) to redistribute to the data contributors. De facto, it would more economically rational for a CTP to maximize their costs under the RCB requirements rather than generate margins to be given back to data contributors.
  + In addition, the CT risks accelerating the attrition of trading volumes executed on pre-trade transparent markets, as it will provide a benchmark price against which less sophisticated investors will be executed, either on dark pools or on systematic internalisers. This is also illustrated by the situation in the US where there is no longer retail flow on lit and multilateral venues, which has translated in a fundamental transformation of the equity market structure (i.e. turning increasingly to dark bilateral trading).
* Direct costs:
  + Now focusing on direct costs, as data contributor, based on the proposed minimum requirements with the following assumptions:
    - Latency constraints understood as median
    - CTP located in many data centers in Europe
    - CTP is offering capacity to connect network carrier lines directly to their network equipment (ie. No Euronext network device required at CTP DC location).
    - Bonds and Equity CTP Sharing the same protocol (including cinematics and rejection mechanism)
    - Data transmitted in efficient manner (binary format, limited to BBO1 for pre-trade)
  + Whilst we are keen to provide general orders of magnitude to inform the discussion on this point, Set-up and run costs are hard to sized due to number of unknowns (operational need for monitoring and managing data quality rejection). In addition, set-up and run costs highlighted here are immaterial versus the loss of revenues for data contributors due to the Consolidated Tape competing with their own commercial offering based on the reception for free of the data they usually commercialise.
    - Estimated set-up costs for Euronext as a data contributor: from our experience of past projects, we have estimated initial set-up costs to be contained within a range of 1 to 2M€. This estimate covers both Bond and Equity scopes.
    - Estimated annual run costs for Euronext as a data contributor:We estimate run cost to be in the range of 1 M€/year, including network connectivity, maintenance, monitoring and administrative costs.

As such, we strongly encourage ESMA (i) to indeed monitor very closely the full costs and benefits associated with the CT in order to implement remedies where need be and (ii) provide as from the very start of the CT operation a viable economic model for both the CT and data contributors through the appropriate definition of the Reasonable Commercial Basis framework in the context of the CT (as per our response to Q27).

<ESMA\_QUESTION\_CP2\_65>

**Q66: Do you expect the benefits from the proposed real time data transmission requirement for input data to outweigh the operational costs borne by data contributors?**

<ESMA\_QUESTION\_CP2\_66>

As an organisation who views CMU as being part of its DNA, we share the desire that the benefits of the real time data transmission requirements will outweigh the operational costs borne by data contributors however whether this will indeed be the case is far from evident at this stage.

The CT will undoubtedly provide at least in the short term – a new vehicle to further increase the readability and visibility and hence possibly attractiveness of EU equity markets.

But in the medium to longer run, without an adequate economic model the CT risks actually destroying a lot of incentives for the most important data contributors, the operators of trading venues who are core to the success of the CMU, supporting capital raising, transparent markets and equal access to the market for all participants. Indeed, firstly the CT will directly compete with most of their market data streams, which will potentially be consolidated and redistributed at a price that will not reflect the actual economic costs of providing the CT (please refer to our response to Q27 and Q30). Secondly, the CT risks accelerating the attrition of trading volumes executed on pre-trade transparent markets, as it will provide a benchmark price against which less sophisticated investors will be executed, either on dark pools or on systematic internalisers. This is also illustrated by the situation in the US where there is no longer retail flow on lit and multilateral venues, which has translated in a fundamental transformation of the equity market structure (i.e. turning increasingly to dark bilateral trading).

For these reasons the impact of the CT should be carefully monitored going forward bearing in mind in particular the risks and concerns outlined above and in previous questions.

We are responding to this question as a data contributor. From this perspective also we would stress that the costs of transmitting the data (see also answer to question 64) are considerable and (both set-up and run costs) will need to be borne by the data contributor.

<ESMA\_QUESTION\_CP2\_66>

**Q67: Do you think that the input and output data fields strike a balance between reporting burden for data contributors/CTPs and benefits for CT users?**

<ESMA\_QUESTION\_CP2\_67>

Yes, we generally believe the input strikes the right balance.

Book depth should be aligned with the level of depth that the CTP needs to provide to the end customer. Anything different would not be in line with the L1 text and would also increase the Consolidated Tape’s set-up and run costs.

<ESMA\_QUESTION\_CP2\_67>

**Q68: Do you think that the proposed data quality requirements are sufficient to achieve the CT’s objectives without generating excessive compliance burdens? Please explain.**

<ESMA\_QUESTION\_CP2\_68>

Yes, Euronext broadly agrees. The compliance burdens will be considerable however data quality is critical.

<ESMA\_QUESTION\_CP2\_68>

**Q69: Which costs do you expect to implement the revenue distribution scheme? Please differentiate between one-off and on-going costs, between fixed and variable costs as well as between direct and indirect costs.**

<ESMA\_QUESTION\_CP2\_69>

Euronext expects that the implementation of the revenue distribution scheme will imply limited costs versus the operation of the tape as most will be based on data already received and computed by the CT as part of its core activities (MIC, transaction data with relevant flags, ISIN, etc.)

<ESMA\_QUESTION\_CP2\_69>

**Q70: Which costs do you expect to implement the suspension and the resumption of the revenue distribution scheme? Please differentiate between one-off and on-going costs, between fixed and variable costs as well as between direct and indirect costs.**

<ESMA\_QUESTION\_CP2\_70>

No response.

<ESMA\_QUESTION\_CP2\_70>