

MiFIR Review Consultation Package

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 this paper and in particular on the specific questions summarised in Annex I. 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**.

All contributions should be submitted online at www.esma.europa.eu under the heading 'Your input - Consultations'.

Publication of responses

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

Data protection

Information on data protection can be found at www.esma.europa.eu under the heading '[Data protection](#)'.

Who should read this paper?

This consultation paper is of particular interest to trading venues, data reporting service providers, and investment firms including SIs. It targets specifically those stakeholders which envisage to apply as a European consolidated tape provider. Furthermore, it aims at all future data contributors and data users of European consolidated tapes. The consultation paper is also of interest to other stakeholder groups such as the asset management industry, as well as industry and consumer associations.

List of acronyms

APA	Approved Publication Arrangement
ARM	Approved Reporting Mechanism
BAFO	Best and Final Offer
CMU	Capital Markets Union
CP	Consultation Paper
CSV	Comma-Separated Values
CT	Consolidated Tape
CTP	Consolidated Tape Provider
DPE	Designated Publishing Entity
DORA	Digital Operational Resilience Act
DRSP	Data Reporting Service Provider
EBBO	European Best Bid and Offer
ESMA	European Securities and Markets Authority
ETF	Exchange-Traded Fund
EU	European Union
FR	Financial Regulation
GUI	Graphical User Interface
HFT	High Frequency Trading
ITS	Implementing Technical Standard
MiFID II	Markets in Financial Instruments Directive II
MiFIR	Markets in Financial Instruments Regulation

MTF	Multilateral Trading Facility
NCA	National Competent Authority
OTC	Over The Counter
OTF	Organised Trading Facility
PUE	Power Utilisation Effectiveness
RTS	Regulatory Technical Standards
SI	Systematic Internaliser
TV	Trading Venue
UTC	Coordinated Universal Time

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1 Executive Summary

Reasons for publication

The latest amendment of the Markets in Financial Instruments Regulation (MiFIR) which entered into force on 28 March 2024 changes, among others, the provisions around the establishment of consolidated tape providers (CTPs) and for data reporting service providers (DRSPs). ESMA was mandated by the European Commission to develop several draft technical standards and to periodically organise competitive CTP selection procedures. ESMA is now seeking input on its proposed technical standards and its first reflections regarding the CTP selection criteria.

Contents

Following a general introduction (section 2), this consultation paper contains ESMA's considerations on technical standards concerning: the input and output data requirements of CTPs (section 3), the revenue redistribution scheme for the equity CTP (section 4), the synchronisation of business clocks (section 5), and the authorisation and organisational requirements for DRSPs (section 6). Furthermore, ESMA is seeking stakeholders' feedback on its initial reflections on the specification of the assessment criteria for the CTP selection procedure (section 7).

Next Steps

Based on the responses received to this consultation, ESMA will prepare the final report and intends to submit the final draft technical standards to the European Commission by the legislative deadline of 29 December 2024. It will also publish a feedback statement on the specification of the assessment criteria for the CTP selection procedure by the end of 2024.

2 Introduction

1. On 25 November 2021, the European Commission published a package of legislative proposals aiming at implementing some of the key commitments in the 2020 Capital Markets Union (CMU) action plan by empowering investors with better access to market data.
2. The set of legislative proposals included a review of the Markets in Financial Instruments Regulation (MiFIR), with particular focus on enhancing market data transparency and removing the obstacles that until now have prevented the emergence of a consolidated tape (CT) in the European Union (EU).
3. Following the achievement of a political agreement among the co-legislators, the final legislative amending text of MiFIR¹ (“MiFIR review”) was published in the Official Journal of the European Union on 8 March 2024 and entered into force on 28 March 2024.
4. The amended text changes in particular the provisions around the establishment of consolidated tape providers (CTPs) and for data reporting service providers (DRSPs). It requires ESMA to develop new draft Regulatory Technical Standards (RTS) and to propose revisions to existing ones in order to facilitate this process.
5. This consultation paper (CP) includes those draft technical standards with focus on: (i) the input and output data requirements of CTPs, (ii) the revenue redistribution scheme for the equity CTP, (iii) the synchronisation of business clocks, and (iv) the authorisation and organisational requirements for DRSPs. It also includes (v) ESMA’s initial reflections on the specification of assessment criteria for the CTP selection.
6. The RTS on input and output data fulfils ESMA’s mandate under Article 22b of MiFIR to develop reporting instructions and data quality requirements for prospective CTPs and data contributors. It specifies (1) the minimum quality standards of protocols for the data transmission, (2) the required quality and substance of data for the operation of CTs (for the equity and bond CT²), and (3) data quality measures to be adopted by CTPs.
7. The RTS on revenue redistribution relates to Article 27h(8) of MiFIR which mandates ESMA to specify the weighting and the methodology for calculating the amount of a CTP’s revenue that has to be redistributed to data contributors. Furthermore, the RTS includes the specification of criteria under which a CTP can suspend the participation

¹ [Regulation - EU - 2024/791 - EN - EUR-Lex \(europa.eu\)](#).

² The required data fields for the derivatives CTP will be specified at a later stage through an amending RTS once the review of RTS 2 (derivatives provisions) is finalised.

of a data contributor in the revenue redistribution scheme as well as the conditions to resume the application of such scheme.

8. The RTS on clock synchronisation, originates from the new Article 22c of MiFIR which transposes the clock synchronisation requirement previously set out in MiFID II. The article subjects to the clock synchronisation requirement also systematic internalisers (SIs), designated publishing entities (DPEs), approved publication arrangements (APAs) and CTPs, in addition to trading venue operators and their members or participants. This CP includes ESMA's proposal to specify the level of accuracy to which business clocks must be synchronised.
9. The draft technical standards on the authorisation and organisational requirements for data reporting service providers (DRSPs) include ESMA's (1) proposal to amend RTS 13 and the related implementing technical standards (ITS) to only apply to APAs and approved reporting mechanisms (ARMs) and (2) a proposal for a new RTS and a new related ITS for the authorisation of CTPs as mandated under Article 27db(7) of MiFIR.
10. Finally, Article 27da of MiFIR mandates ESMA to organise competitive selection procedures to select entities that are able to provide a CT. The CP describes ESMA's initial reflections on the assessment of CTP applicants including: (1) a proposed distinction between selection and award criteria, (2) considerations on the interactions between assessment criteria and with existing and future provisions in level 1 and level 2 acts, and (3) expectations on minimum requirements and key elements underpinning the scoring methodology.
11. Based on the responses received to this consultation, ESMA will prepare the final report and intends to submit the final draft technical standards to the European Commission by the legislative deadline of 29 December 2024.

3 RTS on input and output data of CTPs

12. Article 22b of the revised MiFIR text empowers ESMA to develop draft RTS prescribing data quality requirements for prospective CTPs and data contributors, with the aim to contribute to the removal of the obstacles preventing the establishment of CTPs.
13. A detailed analysis of the legal mandate underpinning the RTS on CTP input/output data is presented in section 3.1. The section also provides an analysis of the interdependencies of key elements of this RTS with other legal texts subject to review within the revision of the MiFID package and outlines how they will be reflected in the analysis and proposal in section 3.2.

3.1 Mandate

Article 22b – Data quality

1. The data transmitted to the CTP pursuant to Article 22a(1) and the data disseminated by the CTP pursuant to Article 27h(1), point (d), shall comply with the regulatory technical standards adopted pursuant to Article 4(6), point (a), Article 7(2), point (a), Article 11(4), point (a), and Article 11a(3), point (a), unless provided otherwise in the regulatory technical standards adopted pursuant to paragraph 3, points (b) and (d), of this Article.

2. The Commission shall establish an expert stakeholder group by 29 June 2024 to provide advice on the quality and the substance of data and the quality of the transmission protocol referred to in Article 22a(1). The expert stakeholder group and ESMA shall work closely together. The expert stakeholder group shall make its advice public.

The expert stakeholder group shall be composed of members with a sufficiently wide range of expertise, skills, knowledge and experience to provide adequate advice.

The members of the expert stakeholder group shall be selected following an open and transparent selection procedure. In selecting the members of the expert stakeholder group, the Commission shall ensure that they reflect the diversity of market participants across the Union.

The expert stakeholder group shall elect a Chair from among its members, for a term of two years. The European Parliament may invite the Chair of the expert stakeholder group to make a statement before it and to answer any questions from its members whenever so requested.

3. ESMA shall develop draft regulatory technical standards to specify the quality of the transmission protocol, measures to address erroneous trade reporting and enforcement standards in relation to data quality, including arrangements regarding cooperation between data contributors and the CTP, and, where necessary, the quality and the substance of the data for the operation of the consolidated tapes.

Those draft regulatory technical standards shall in particular specify all of the following:

- a) **the minimum requirements for the quality of the transmission protocols referred to in Article 22a(1);**

- b) the presentation of the core market data to be disseminated by the CTP, in accordance with prevailing industry standards and practices;**
- c) what constitutes the transmission of data as close to real time as technically possible;**
- d) where necessary, the data needed to be transmitted to the CTP in order for it to be operational, taking into account the advice of the expert stakeholder group established pursuant to paragraph 2, including the substance and the format of those data, in accordance with prevailing industry standards and practices.**

For the purposes of the first subparagraph of this paragraph, ESMA shall take into account the advice from the expert stakeholder group established pursuant to paragraph 2 of this Article, international developments, and standards agreed at Union or international level. ESMA shall ensure that the draft regulatory technical standards take into account the transparency requirements laid down in Articles 3, 6, 8, 8a, 8b, 10, 11, 11a, 14, 20, 21 and 27g.

ESMA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 29 December 2024.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

14. As per the above, Article 22b(3) of MiFIR requires ESMA to specify:
- the minimum requirements for the quality of the transmission protocols utilised for the transmission of data to the CTP (letter a);
 - data quality measures and enforcement standards to be implemented by the CTP;
 - the quality and the substance of the data for the operation of the consolidated tapes, which is understood to include, in particular:
 - *the presentation of the core market data to be disseminated by the CTP, in accordance with prevailing industry standards and practices* (letter b);
 - *what constitutes the transmission of data “as close to real time as technically possible”* (letter c)
 - *where necessary, the data to be transmitted to the CTP, taking into account the advice of the expert stakeholder group established pursuant to paragraph 2, including the substance and the format of those data, in accordance with prevailing industry standards and practices* (letter d).
15. Additionally, pursuant to Article 22b(1) the data transmitted to, and disseminated by, the CTP shall comply with the pre- and post-trade transparency obligations set in RTS 1 (transparency for equity instruments) and RTS 2 (transparency for non-equity instruments), “unless provided otherwise” in the RTS on CTP data quality.

16. In the achievement of this alignment, it is critical to take into consideration that the MiFIR review sets 3 different deadlines for the adoption of the respective acts. Specifically:

RTS	Deadline for submitting draft RTS
CTP input/output data	29 December 2024 – (9 months)
RTS 1 Review (Equity)	28 March 2025 – (12 months)
RTS 2 Review	<i>To be reviewed in two steps:</i>
<i>Bonds provisions</i>	29 December 2024 – (9 months)
<i>Derivatives provisions</i>	29 September 2025 – (18 months)

17. In order to reflect the different timelines underlying the consultation, formulation and endorsement of the respective legal acts, ESMA intends to follow a staggered approach for the development of the draft RTS on CTP input/output data. Details on the staggered approach and on the scope are provided respectively in **Box 1** and **Box 2**.

Box 1: Staggered approach for draft RTS on CTP input/output data

ESMA intends to develop the RTS on CTP input/output data in two steps.

1. Submission of draft RTS (applicable to equity and bond CTPs) – by 29 December 2024

The draft RTS currently consulted in this CP and to be submitted by 9 months after the entry into force of the MiFIR review will specify all the provisions applicable to the equity and bond CTPs. The consistency of those provisions with the review of RTS 1 and RTS 2 is ensured by the fact that:

- The bond provisions contained in RTS 2 are reviewed following the same timeline of the RTS on CTP input/output data;
- The proposals regarding input/output data for the equity CTP are included in the same consultation paper as the one concerning the review of RTS 1, whose consultation period is expected to end in Q3 2024. Consequently, the feedback collected through this consultation would be analysed for the development of draft RTS on CTP input/output data.

2. Revision of the RTS (by incorporating provisions applicable to the derivatives CTP) – by 29 September 2025 .

The provisions related to the derivatives CTP input/output data will be incorporated at a later stage by 29 September 2025, in parallel with the review of the second stage of the RTS 2 review.

Box 2: Scope of the current CP and references to other consultations

The scope of the current CP covers:

1. Proposals with no dependencies on the review of RTS 1 and RTS 2, namely minimum requirements for transmission protocols, choice of the technical data formats definition of real time, data quality measures, and enforcement standards;
2. Proposals for the quality and substance of input/output data of the bond CTP.

For the proposals related to the input/output data applicable to the equity CTP, stakeholders can refer to the upcoming third consultation package which is expected to be published at the beginning of Q3 2024.

3.2 Analysis and proposal

3.2.1 Quality of transmission protocols

18. The quality of transmission protocols will play a pivotal role in ensuring the robustness and reliability of CTP data. In order to specify the minimum requirements for the quality of transmission protocols with the purpose of guaranteeing the fast, high-quality, and secure transmission of data to the CTP, ESMA considers relevant to expand on the following aspects:
- a. the dimensions of transmission protocols quality; and
 - b. suitable minimum thresholds/requirements.
19. Drawing upon insights from a study³ commissioned by ESMA to Accenture in 2023, the evaluation of transmission protocols quality for CTP purposes can be structured around several technical criteria, which can be grouped into the following categories:

Categories defining quality of transmission protocols	Technical requirement
Performance	Latency Throughput Connection setup time optimization Scalability
Reliability	Error detection mechanism Error correction mechanism Recovery mechanism
Security	Data confidentiality Authentication Authorisation Non-repudiation
Compatibility	Open solution

³ [ESMA12-437499640-2360 Study on data formats and transmission protocols \(europa.eu\)](#).

20. By structuring the assessment framework around these comprehensive categories, ESMA aims to provide an approach for defining minimum requirements for the quality of transmission protocols for the purpose of transmission of CTP input data. This framework establishes the foundation for setting suitable minimum thresholds that are realistic, aligned with the regulatory objectives, and harmonised with international standards.
21. Moreover, in light of cost efficiency considerations, ESMA recognises the potential benefits of establishing a single set of requirements applicable across the three asset classes. This approach would streamline compliance efforts for data contributors reporting to multiple CTPs across various asset classes, promoting operational efficiency and reducing administrative burdens.
22. However, it is essential also to acknowledge that transmitting data about different asset classes may have distinct business needs and regulatory requirements (e.g. transmission of pre-trade equity data being more sensitive to latency aspects). Therefore, this consultation presents an opportunity to assess whether varying sets of requirements tailored to specific asset classes should be contemplated. In particular, ESMA seeks to gather insights and perspectives from stakeholders on the feasibility and implications of adopting a uniform set of requirements versus tailored requirements for different asset classes, with the aim to develop a framework that strikes the right balance between cost efficiency, regulatory objectives, and industry-specific considerations.
23. The subsequent sections of this paper delve deeper into the minimum requirements of the quality of transmission protocols for the purpose of data transmission to the CTP, elaborating on their components and implications.

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

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?

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?

3.2.1.1 Performance

24. Achieving optimal performance in transmission protocols is essential for ensuring timely and efficient data delivery.

25. Key technical features to achieve high performance levels include:
- a. **Latency optimisation:** minimising the delay in data transmission, ensuring that information reaches its destination as quickly as possible;
 - b. **Throughput:** this refers to the amount of data that can be transmitted over a network within a given time frame, indicating the efficiency of the transmission protocols in handling data volumes;
 - c. **Connection setup time:** reducing the time it takes to establish a connection between communicating devices, enhancing the overall responsiveness of the network;
 - d. **Scalability:** ensuring that the transmission protocols can efficiently accommodate growth in network size and demands, allowing for seamless expansion without compromising performance.
26. Prioritising these performance metrics enables transmission protocols to effectively meet the dynamic needs of the CTP, facilitating seamless data transmission and enhancing overall operational efficiency.
27. The proposed minimum requirements are:

Performance features	Minimum requirements
Latency	Latency should be maintained below 100 milliseconds.
Throughput	Throughput should exceed 100 Megabits per second (Mbps)
Connection setup time	Round Trip Time (RTT) for connection setup should be less than 500 milliseconds
Scalability	The protocols must support operation in clustered or load-balanced environments.

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.

3.2.1.2 Reliability

28. Ensuring robust reliability in transmission protocols is imperative for maintaining data integrity and minimising disruptions in communication.
29. Key technical features essential for achieving high reliability levels encompass:
- a. **Error detection mechanism:** Implementing robust error detection mechanisms enables the identification of data transmission errors, ensuring the integrity of transmitted information;
 - b. **Error correction mechanism:** Integrating effective error correction mechanisms enables the protocols to automatically rectify detected errors, mitigating potential data corruption issues and ensuring accurate data delivery;
 - c. **Recovery mechanism:** Incorporating resilient recovery mechanisms enables the protocols to recover from transmission failures or interruptions swiftly, ensuring seamless continuity of data transmission operations.
30. By prioritising these reliability metrics, transmission protocols can uphold consistent data integrity and reliability, thereby fostering uninterrupted communication channels crucial for critical data transmission processes.
31. The proposed minimum requirements are:

Reliability features	Minimum requirements
Error detection mechanism:	The protocols must include error detection mechanisms to ensure accurate identification of data transmission errors.
Error correction mechanism:	The protocols should incorporate error correction mechanisms to automatically rectify detected errors, thereby minimising data corruption issues.
Recovery mechanism:	The protocols must feature recovery mechanisms to swiftly recover from transmission failures or interruptions, ensuring seamless continuity of data transmission operations.

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.

3.2.1.3 Security

32. Establishing robust security measures within transmission protocols is crucial for safeguarding sensitive data and mitigating potential threats to communication channels.
33. Key technical features essential for achieving high security levels encompass:
- a. Data confidentiality:** Implementing strong encryption techniques ensures that data remains confidential during transmission, safeguarding it from unauthorised access or interception;
 - b. Authentication:** Integrating robust authentication mechanisms verifies the identity of communicating parties, preventing unauthorised entities from gaining access to sensitive information;
 - c. Authorisation:** Enforcing strict authorisation protocols ensures that only authenticated users have access to specific resources or functionalities, reducing the risk of unauthorised data manipulation or misuse;
 - d. Non-repudiation:** Incorporating non-repudiation mechanisms provides assurance that the originator of a message cannot deny sending it, enhancing accountability and trustworthiness in communication exchanges.
34. By requesting these security features, transmission protocols can establish a secure environment for data transmission, fostering trust and confidence in critical communication processes.
35. The proposed minimum requirements are:

Security features	Minimum requirements
Secure transport layer	The protocols must support a secure transport layer to ensure the confidentiality of data during transmission.
Authentication	The protocols must support authentication credentials-based or certificate-based authentication mechanisms to verify the identity of communicating parties.
Authorisation	The protocols must implement authorisation mechanisms to control access to specific

	resources or functionalities based on user roles or permissions.
Non-repudiation	The protocols must incorporate non-repudiation mechanisms to ensure that the originator of a message cannot deny sending it.

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.

3.2.1.4 Compatibility

36. Promoting compatibility within transmission protocols is crucial for facilitating seamless communication across diverse systems and platforms.

37. Compatibility requirements encompass two key aspects:

- a. **Openness of the solution:** it refers to the freedom granted to users to access, modify, and distribute the solution without restrictions, promoting transparency and flexibility in its utilisation.
- b. **Interoperability:** it ensures that the protocols can seamlessly communicate and integrate with various systems and platforms, allowing for efficient data exchange and collaboration.

38. The proposed minimum requirements are:

Compatibility features	Minimum requirements
Open solution	The implementation of the protocols must adhere to non-proprietary standards
Interoperability	The protocols must support at least one widely recognized internet standard

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.

3.2.2 Quality and substance of data

3.2.2.1 Transmission of data “as close to real time as technically possible”

39. The core market and regulatory data disseminated by the CTP can serve its purpose of enabling market participants to make informed investment decisions only insofar as the consolidated data reflects the traded price and volume of financial instruments at any point in time. In this regard, it should be noted that the mandate under Article 22b(3), letter c), empowers ESMA to define what constitutes “real time” for the transmission of input data, but not for the dissemination of output data. However, to allow the CTP to comply with the requirement set in Article 27h(1) d) to disseminate data as close to real time as technically possible, ESMA considers that data contributors should transmit input data to the CTP within delays that are significantly stricter than the ones applicable to post-trade transparency data publication, currently set⁴ at a maximum of 1 and 5 minutes for equities and non-equities, respectively and, allowing for even later reporting for OTC transactions concluded outside daily trading hours.
40. ESMA is aware that most APAs and trading venues already publish transactions significantly before the abovementioned maximum delays. Thus, to determine what is currently “as close to real time as technically possible”, ESMA has analysed the statistics provided by the APAs under its direct supervision⁵, finding that while publication delays, measured as the difference between the execution timestamp and the publication timestamp, average around 150 milliseconds, with the median being significantly lower, in the range of 4 to 35 milliseconds. Similar figures emerge from the responses to a survey disseminated to data contributors, in the context of ESMA’s study on data formats and transmission protocols⁶, whereby respondents indicated having Service Level Agreements that range between 1 millisecond and 1 second. No significant difference could be observed between equity and non-equity datasets, nor a strong correlation between time required for publication and volume of published transactions.
41. As it concerns the desired dissemination delay and being mindful of the high costs associated to low latency IT systems, ESMA considered the estimates for the operation of the equity CTP included in the Impact Assessment accompanying the MiFIR review proposal⁷. In that paper, the EC found that speed of dissemination becomes a major driver of operational cost only when trying to achieve the very low-latency (in the magnitude of micro and nano seconds) of IT systems used for high-frequency trading. The EC thus concluded that a target latency for the CTP between 200 and 300

⁴ Article 14(1)(a) of RTS 1 and Article 7(4)(b) of RTS 2.

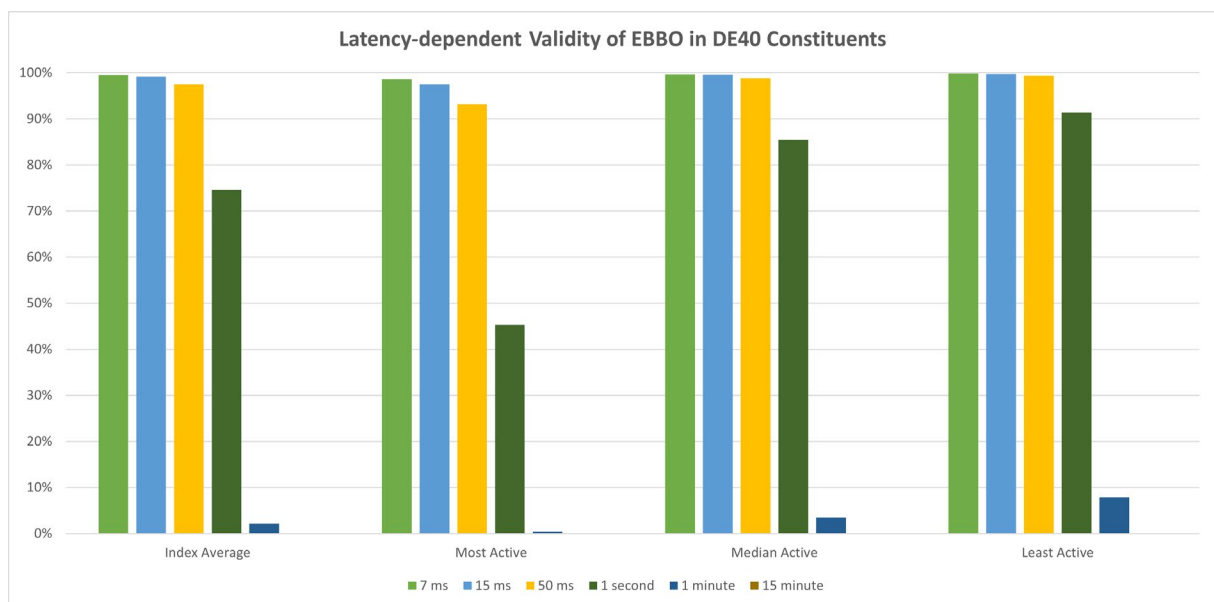
⁵ According to 2023 FITRS data, APAs under ESMA’s direct supervision publish 94% of equity transactions and 98% of non-equity transactions published by all APAs.

⁶ [Study on data formats and transmission protocols](#).

⁷ <https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=SWD:2021:0346:FIN:EN:PDF>, page 40.

milliseconds from execution timestamp would be a satisfactory compromise between CT accuracy and operational costs.

42. Finally, ESMA is mindful of the different degree of timeliness required for a meaningful consolidation of pre- and post-trade data, with pre-trade data being more sensitive in this regard.
43. This is because, for pre-trade equity data, the equity CTP shall disseminate the European best bid and offer (EBBO). This data point appears particularly time sensitive: according to evidence provided by one exchange⁸, related to trading in the most active shares included in some significant European indexes, the accuracy level of pre-trade EBBO drops to 45% after one second from TV's timestamp.



44. ESMA is aware that the publication delay of the EBBO disseminated by the CTP, whatever small, is one of the factors that impede the direct use of this data point for trading. However, ensuring timely publication of this information would still enable its use for purposes other than trading.
45. In light of the above, ESMA proposes that:
- For post-trade data, regardless of asset class, data contributors should transmit data to the CTP no later than 100 milliseconds from the execution timestamp (field 1 of Table 3 of Annex I of RTS 1 and field 1 of Table 2 of Annex II of RTS 2) for transactions executed on a trading venue and, 200 milliseconds from the execution timestamp for transactions executed OTC;

⁸ <https://www.cboe.com/insights/posts/mission-possible/>.

- For pre-trade equity data, considering the abovementioned high time-sensitiveness of EBBO, data contributors should transmit data to the CTP no later than 50 milliseconds from the timestamp of the submission of the order (field 1 of Table 1b of Annex I of RTS 1).

46. Such thresholds are calibrated so to leave enough room for CTPs to disseminate a sufficiently accurate tape, while not being so short to give rise to geographical latency⁹ issues for data contributors.

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

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

3.2.2.2 Standards and format of data to be transmitted to the CTP

47. Article 22a of the revised text of MiFIR requires data contributors to transmit data to the CTP in a harmonised format. This requirement is underscored in Recital 16, where the rationale for prescribing a uniform standard for data transmission is supported by the objective to prevent the CTP from undergoing a burdensome, costly, and time-consuming process of sourcing data from contributors employing diverse data-sharing arrangements.
48. As part of the mandate of Art. 22b of defining the quality and substance of the data for the operation of the CTPs, ESMA will specify in the draft RTS on CTP input/output the data standards and format for the transmission of data to the CTPs.
49. In alignment with the reasoning supporting the proposal of minimum requirements for the quality of transmission protocols, ESMA will develop a proposal for the choice of the technical format for input data on the basis of the findings resulting from the study¹⁰ commissioned to Accenture in 2023, which provided an assessment of most suitable data formats for the purpose of CTPs.
50. The study assessed a set of commonly used data formats against several technical criteria such as performance in data transmission, ability to ensure data quality, ease of use, flexibility and level of adoption. According to the findings of this assessment, **JSON** emerged as the most suitable data format for generic regulatory reporting purposes, thanks to its excellent performances across most of the technical criteria.

⁹ According to a study from one exchange, information travel time across the main EU financial hubs takes at most 12 milliseconds: [Why Physics Makes a Pre-trade Tape Impossible | Nasdaq](#).

¹⁰ [ESMA12-437499640-2360 Study on data formats and transmission protocols \(europa.eu\)](#).

51. However, when focusing on the specific use case of CTPs, the suitability of JSON over other formats seems to be less evident, requiring further considerations. JSON would indeed be a prime candidate as a harmonised data format, ensuring high-quality data for CTPs. Its widespread adoption within the financial industry, including native support by ISO20022, and its compatibility with several transmission protocols further support its adoption for the CTP context. Compared to alternative solutions, JSON stands out for its flexibility, accommodating potential revisions to requirements with ease. Additionally, its high reliability and support for technical validation are relevant features for ensuring data quality.
52. Despite the many advantages, JSON raises potential concerns regarding real-time transmission performance, which is a critical factor for CTP operations. JSON's text-based format, differently from binary ones, might result in significant network overhead, leading to larger data sizes and increased transmission times – particularly concerning for large datasets typical in the context of CTPs. Thus, while JSON offers many advantages, its impact on transmission performance warrants careful consideration in the context of the CTP framework.
53. The study identified **FAST** and **SBE** as the most suitable alternative solutions for CTP data transmission, particularly in environments with stringent performance requirements. These binary formats offer superior performance in terms of latency, making them well-suited for real-time data streaming applications, such as financial market data dissemination.
54. On the other hand, it's important to note that FAST and SBE exhibit limitations compared to JSON, particularly in terms of flexibility, ease of use, and protocol compatibility. Their binary nature makes them less flexible and human-readable, potentially complicating data handling and integration processes. Additionally, their compatibility with existing protocols may be limited, posing challenges during implementation and integration phases. Therefore, while FAST and SBE offer enhanced performance benefits, their adoption may introduce operational constraints, requiring careful consideration of trade-offs during the implementation phase.
55. ESMA acknowledges the critical needs of establishing standardised data formats for the operation of CTPs to ensure harmonised data transmission and facilitate seamless data exchange among market participants. While the current CP does not propose a prescribed data format, it presents a baseline proposal recommending JSON as the preferred format for input data due to its outstanding performance across various technical criteria.
56. However, ESMA seeks input from stakeholders on several key considerations regarding the adoption of JSON as the required format for input data. Firstly, stakeholders are invited to assess whether the performance of JSON in terms of real-time data transmission would be acceptable for the purpose of CTPs, particularly considering the lower level of implementation feasibility characterising alternative solutions that may offer higher latency performance.

57. Secondly, stakeholders are encouraged to evaluate the coherence of JSON with other CTP requirements, such as those related to transmission protocols (3.2.1), real-time definition (3.2.2.1) and presentation of output data (81).
58. Thirdly, ESMA acknowledges the importance of cost-efficiency and consistency across asset classes. As such, ESMA proposes to require a single solution for data format across all asset classes. However, stakeholders are invited to provide feedback on whether different formats should be requested for equity, bond and derivatives CTPs, considering the distinct business needs and operational requirements associated with each asset class.

JSON	FAST/SBE
<i>Baseline proposal</i>	<i>Alternative proposals</i>
<p>Advantages</p> <ul style="list-style-type: none"> ✓ Flexible and easy to use format ✓ Widely adopted by financial industry across several use cases (ISO20022 compliant) ✓ High protocols compatibility <p>Disadvantages</p> <p>X Low performance in terms of latency for large volume of data</p>	<p>Advantages</p> <ul style="list-style-type: none"> ✓ High performance in terms of latency ✓ Moderate to high adoption by financial industry for real-time data dissemination <p>Disadvantages</p> <p>X Low flexibility / Low protocol compatibility (due to proprietary standards)</p>
Subjects to consult	
<ul style="list-style-type: none"> – Trade-off baseline vs alternative proposals – Coherence of the proposals with other CTP requirements (transmission protocols, real-time requirement and output data) – Single format across asset classes vs tailored format per asset class 	

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.

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.

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?

3.2.2.3 Input and output data for the bond CTP

3.2.2.3.1 General approach

59. The CTP's institutional role of receiving and consolidating post-trade transparency data published by trading venues and APAs inherently hints at the need of aligning, in terms of format and content, the CTP input/output data to the existing technical standards where the relevant information is already specified in RTS 2 for non-equity instruments. Various provisions of the amended MiFIR support this conclusion.
60. First, in accordance with Article 22b(1), the data provided to the CTP and the data disseminated by the CTP shall comply with RTS 2 unless provided otherwise in the new RTS on CTP input/output data. The cross-reference to RTS 2 guarantees that the CTP input/output data is consistent with the post-trade data that trading venues and APA are publishing, simplifying the reporting process and preventing excessive compliance load for data contributors.
61. Second, the references to further specification of the CTP input and output data in Article 22b of MiFIR are accompanied by the words "where necessary". This further suggests that specifications of CTP data should only be developed if those in RTS 2 are not sufficient or not appropriate for the CTP data, aligning with the objective of avoiding unnecessary reporting burden. This could be the case of fields only relevant for the CTP, such as the timestamp related to the "dissemination of core market data", referred to in Article 2(36b)(b)(v) of MiFIR, or the regulatory data which does not exist in RTS 2.
62. Third, in accordance with the third subparagraph of Article 22b(3), ESMA is required to ensure that the CTP RTS on input/output "take into account the reporting requirements" laid down in all the articles related to pre- and post-trade transparency for equity and non-equity (Articles 3, 6, 8, 8a, 10, 11, 11a, 14, 20, 21 of MiFIR) as well as in the article on organisational requirements for APAs (Article 27g of MiFIR).
63. Taking the above into account, ESMA considers that the two following principles should apply when developing the CTP RTS on input/output. Those principles are intended as general guidelines, not preventing the specification of additional data elements – not specified in RTS 2 - that may be relevant for CTP data aggregation, comparison and dissemination:

- Parsimony: the input data to the CTP should only be specified where necessary, i.e. where the data is not already specified in RTS 2.
- Consistency: where the data is already specified in RTS 2, the RTS on input/output should be drafted in such a way that the same information is not duplicated in both RTSs. To achieve this objective, the fields common to both RTSs will be specified in RTS 2, and cross-references to those fields will be made in the RTS on input/output. This approach ensures that future changes to RTS 2 are automatically applied to the CTP fields defined in the CTP RTS on input/output.

64. In light of the above, ESMA has compared the data that the CTP shall receive and disseminate with the fields defined in RTS 2 (for bonds) to identify gaps and overlaps. The outcome of the analysis is provided below.

3.2.2.3.2 Substance of regulatory data

65. The concept of ‘regulatory data’ was introduced by the MiFIR review. As a result, there is no existing specification of this data in RTS 2. Regulatory data is defined in Article 2(36c) of MiFIR as data related to the status of systems matching orders in financial instruments and data related to the trading status of individual financial instruments.

66. In addition, Recital (13) of the regulation amending MiFIR explains that “Data contributors should also provide regulatory data 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.”

67. ESMA is examining below some characteristics of regulatory data:

- Granularity: while core market data are granular at the level of one transaction, regulatory data are granular at the level of one trading system (“data related to the status of systems matching orders in financial instruments”) and at the level of one instrument (“data related to the status of individual financial instruments”).
- Scope of instruments: the definition of regulatory data in Article 2(36c) of MiFIR does not refer to a specific asset class, indicating that CTPs are expected to disseminate regulatory data for all asset classes.

68. Finally, regulatory data should be provided to the CTP only by trading venues because regulatory data are not relevant for APAs: the status of systems matching orders only concerns trading venues and the status of financial instruments is understood to be the one on the trading venue.

69. Data related to the status of individual financial instruments: Regarding the first table related to the status of financial instruments, ESMA proposes to require CTP to disseminate information on the status of a financial instrument at the level of one trading

venue and one financial instrument. The status of the financial instrument on a given trading venue can be:

- **suspended from trading:** a financial instrument can be suspended from trading on any type of trading venue when that instrument no longer complies with the rules of the trading venue (Article 32 of MiFID II for MTFs and OTFs; Article 52 of MiFID II for regulated markets);
- **removed from trading:** a financial instrument can be removed from trading on any type of trading venue when that instrument no longer complies with the rules of the trading venue (Article 32 of MiFID II for MTFs and OTFs; Article 52 of MiFID II for regulated markets); or
- **subject to a trading halt:** trading venues can temporarily halt or constrain trading in financial instruments if there is a significant price movement in a financial instrument on that market or a related market during a short period (Article 48(5) of MiFID II for regulated market, which article is extended to apply also to MTFs and OTFs via Article 18(5) of MiFID II).

70. The instrument should be identified with an ISIN and the trading venue with a MIC. In addition, the CTP should disseminate information on the validity period of the instrument status to the extent possible (date and time from which the instrument status is valid and date and time from which the instrument status is no longer valid).

71. Based on the above, ESMA suggests that the following Table 1 should be disseminated by the CTP:

Table 1: Data related to the status of individual financial instruments

#	Field identifier	Description	Format
1	Instrument identification code	Code used to identify the financial instrument	{ISIN}
2	Instrument status start date and time	Date and time from which the instrument status is valid	{DATE_TIME_FORMAT}
3	Instrument status end date and time	Date and time from which the instrument status is no longer valid, where relevant. When the instrument status is “removed from trading” the field should be left blank.	{DATE_TIME_FORMAT}
4	Instrument status dissemination date and time	Date and time on which the instrument status is disseminated by the CTP	{DATE_TIME_FORMAT}
5	Instrument status	Description of the status of the financial instrument. The status of the financial instrument can be: (1) suspended from trading, on the trading venue identified in the field “Trading venue”, in accordance with Article 32 and 52 of Directive 2014/65/EU (2) removed from trading, on the trading venue	‘SUSP’ – the instrument is suspended ‘RMOV’ – the instrument is removed ‘HALT’ – the instrument is subject to a trading halt

#	Field identifier	Description	Format
		identified in the field “Trading venue”, in accordance with Article 32 and 52 of Directive 2014/65/EU (3) subject to a trading halt, on the trading venue identified in the field “Trading venue”, in accordance with Articles 18(5) and 48(5) of Directive 2014/65/EU	
6	Trading venue	Identification of the trading venue on which the instrument status is valid (segment MIC where available, otherwise operating MIC). The trading venue is a regulated market, an MTF or an OTF.	{MIC}

Data related to the status of systems matching orders:

72. In accordance with Recital (16) of MiFIR, data contributors should provide regulatory data to keep investors informed of the status of the system matching orders, for example in the event of a market outage.
73. Given the reference to “system matching orders” in Article 2(36c) of MiFIR, this type of information is only relevant for trading venues, hence excluding SI and OTC trading.
74. Information on the current trading phase (e.g. pre-trading, opening, trading, closing auction, closed) could also be valuable information for investors, as the type of order that can be placed on a trading venue depends on the trading phase.
75. One difficulty with displaying information on the status of systems matching orders pertains to the identification of such trading system. Trading venues may identify themselves with a MIC but that would be insufficiently granular because there can be several trading systems under the same MIC.
76. As a result, it is suggested to identify the trading system using a combination of the MIC and the type of trading system, relying on the same list of trading systems as the one proposed in the field “Type of trading system” in the core market data (see below). ESMA is seeking stakeholders’ view on whether other identifiers for the trading system may be used.

Table 2: Data related to the status of systems matching orders

#	Field identifier	Description	Format
1	Trading venue	Identification of the trading venue on which the instrument status is valid (segment MIC where available, otherwise operating MIC). The trading venue is a regulated market, an MTF or an OTF.	{MIC}

#	Field identifier	Description	Format
2	Trading system type	Type of trading system on which the system status is provided	'CLOB' -- central limit order book trading systems 'QDTS' -- quote driven trading systems 'PATS' -- periodic auction trading systems 'RFQT' -- request for quote trading systems 'VOIC' -- voice trading system 'HYBR' -- hybrid trading system 'OTHR' -- any other trading system
3	System status start date and time	Date and time from which the system status is valid	{DATE_TIME_FORMAT}
4	System status end date and time	Date and time from which the system status is no longer valid	{DATE_TIME_FORMAT}
5	System status dissemination date and time	Date and time on which the system status is disseminated by the CTP	
6	System status	Description of the status of the trading system. The trading system can be: (1) subject to an outage; or (2) in one of the following trading phase: pre-opening, opening auction, trading, closing auction, trading-at-last, closed.	[Code to be determined]

3.2.2.3.3 Substance of core market data – post-trade

77. ESMA compared the core market data that CTPs shall receive and disseminate with the post-trade transparency fields defined in RTS 2 to identify gaps and overlaps. The outcome of such comparison was that a limited number of fields need to be defined anew. The approach described below is valid for the bond CTP. As explained in section 3.1 – Box 1, the approach regarding OTC derivatives will be defined at a later stage.
78. Two fields are present in the definition of core market data and absent from RTS 2:

“the timestamp information on the dissemination of core market data”

[Article 2(36b)(b)(v) for Non-Equity]

This field should contain the date and time at which the CTP disseminates data to the users. This information is not known by trading venues and APA, which cannot

therefore report it to the CTP. As a result, this timestamp field should be part of the CTP output data but should not be part of the CTP input data

“the type of trading system”

[Article 2(36b)(b)(vi) for Non-Equity]

CTPs are required to disseminate the type of trading system as output data. It is therefore necessary that trading venues and APAs provide this information to the CTP. This information is currently absent from RTS 2. However, in the consultation papers covering the reviews of RTS 2, a proposal is made to add this field as part of the post-trade information to be published by trading venues and APAs. As a result, it is proposed to cross-refer to this new field in the CTP RTS on input/output data, to ensure consistency between the two sets of reporting requirements.

79. Two fields are not present in the definition of “core market data” and present in RTS 2:

“Venue of publication” - the code used to identify the trading venue and APA publishing the transaction

[Field 16 in Table 2 of Annex II of RTS 2]

This data field identifies the trading venue / APA where the transaction was published and was intended to be published exclusively by the CTP, prior to the MiFIR review. As no CTP existed, this field remained in RTS 1 and RTS 2 but in practical terms, it was not applicable.

The CTP needs to be able to identify the trading venue / APA from which it receives market data, notably to ensure that the CTP can effectively check the completeness of the data transmitted by data contributors, identify obvious errors and request the re-submission of data, in accordance with Article 27h(1)(f). As a result, the field “Venue of publication” should be part of the CTP input data.

In addition, the dissemination of the field by the CTP would help data users to identify the APA that performed the publication of the report as published by the CTP (in the case of off-venue transactions) and to reconcile this information with the one published individually by APAs. Therefore, it is considered relevant to include this field in the CTP output data.

As a result, in the consultation paper covering the review of RTS 2, a proposal is made to amend the field “venue of publication” in RTS 2 to require its publication by trading venues and APAs. Having the field “venue of publication” in both RTSs by means of a cross-reference (RTS 2 and the RTS on input/output) would maintain consistency between the sets of reporting requirements.

“Transaction Identification Code” - a transaction code assigned by trading venues and APAs used in any subsequent reference to the specific transaction

[Field 17 in Table 2 of Annex II of RTS 2]

This data field identifies uniquely each transaction and is used to reconcile transactions in the case of e.g. amendments, cancellations, publication after a deferral.

The CTP needs to be able to uniquely identify the transactions it receives from market data contributors, notably to ensure that the CTP can effectively check the completeness of the data transmitted by data contributors, identify obvious errors and request the re-submission of data, in accordance with Article 27h(1)(f). As a result, the field “Transaction Identification Code” should be part of the CTP input data.

In addition, this field is essential to allow data users to obtain an accurate and comprehensive picture of the transactions which have taken place, including events affecting those transactions after their initial publication (amendments, cancellations, deferrals). Furthermore, the dissemination of this field by the CTP ensures consistency between the two sets of reporting requirements (CTP publications and trading venues/APA publications). As a result, the field “Transaction Identification Code” should be part of the CTP output data.

80. Proposal for the output table:

To ensure that the CTP fields remain consistent with those defined in RTS 2, it is proposed to 1) specify in a dedicated table of the RTS on input/output only the extra fields, that are not present in RTS 2 (i.e. the field “the timestamp information on the dissemination of core market data”); 2) for the remaining fields, cross-refer to the relevant tables in RTS 2. The field “type of trading system” is considered to fall under the latter bucket, given that it is expected to be added to RTS 2 at the same time as the RTS on input/output data is developed.

81. Proposal for the input table:

The only field which is, by construction, part of the CTP output data and not part of CTP input data is the “timestamp information on the dissemination of core market data”, which is expected to be added by the CTP upon dissemination of the core market data. This means that, with the exception of that timestamp field, the input data and the output data are identical. Therefore, ESMA has not identified any information that market data contributors should send to the CTP in addition to the fields that are defined in the output table. Presentation of market data to be disseminated by the CTP.

82. This analysis has been focused solely on identifying the input data necessary for generating output data relevant for the users of the CTP. However, in the case of APAs transmitting data to the CTP, there exists one piece of information that is particularly pertinent for the CTP's monitoring tasks, i.e. the timestamp indicating when APAs receive data from investment firms. This timestamp would enable the CTP to

automatically detect whether potential breaches of the timeliness requirements¹¹ (outlined in section 3.2.2.1) are due to late reporting from the APA or from its client. Despite its potential relevance, this field has not been included in the proposed input data for two main reasons: a) to prevent imposing excessive reporting burdens on APAs, and b) because this information can be requested by the CTP on an ad-hoc basis whenever the timeliness requirement is not met. Nevertheless, if stakeholders deem this timestamp facilitating the CTP to effectively perform its monitoring duties concerning compliance with timeliness requirements without creating excessive burden on data contributors, respondents to this consultation are invited to provide their feedback on this matter.

83. The CTP shall disseminate data in a way that ensures machine-readability and human-readability. The requirement to ensure machine-readability of the disseminated data is specified in Article 27h(1) point (e) (organisation requirements for CTPs) as follows: “A CTP shall ensure that the core market data and regulatory data are easily accessible, machine-readable and usable for all users, including retail investors”. In addition, the obligation for the CTP to disseminate data in way that ensures both human-readability and machine-readability is explained in Recital (28) as follows: “The CTP should ensure that the information provided to retail investors is easily accessible and displayed in a user-friendly and human-readable format”.
84. Based on the above, ESMA proposes to require the CTP to disseminate core and regulatory data:
- **Publication in the same format prescribed for input data**, in order to ensure machine-readability for advanced data users;
 - **Publication in Comma Separated Values (CSV)**, in order to ensure easy accessibility and usability for less advanced data users;
 - Publication in a Graphical User Interface (GUI), to ensure human-readability.
85. In addition, ESMA proposes to request the CTP to publish on its website documentation regarding the way in which the data can be accessed, and to update this documentation with a notice period of 3-month to avoid disruptions in the provision of data.

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?

¹¹ As outlined in section 3.2.3.2, the CTP is expected to monitor the compliance of timeliness requirements for the activation of enforcement measures such as the suspension of revenue distribution or notification to competent authorities.

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

3.2.3 Data quality measures and enforcement standards

3.2.3.1 Background of the proposal

86. The CTP is responsible for ensuring and constantly monitoring the quality of both input and output data. This requirement shall be met by means of several organisational and operational arrangements, namely:
- a. Article 27da(2) f), pursuant to which one of the selection criteria, to which the CTP shall remain compliant on ongoing basis, is setting up methods and arrangements to ensure data quality;
 - b. Article 27h(1) f), pursuant to which the CTP shall have systems in place that can effectively check the completeness of the data transmitted by data contributors, identify obvious errors, and request the re-submission of data;
 - c. Article 27h(8) c), pursuant to which the CTP has the power of suspending revenue redistribution to data contributors breaching the requirements set in Article 22a, 22b and 22c.
87. Drawing upon similarities shared by CTPs with APAs in their role of receiving, processing, and disseminating trade data, the proposed data quality measures to be prescribed in the RTS on CTP input/output data are an adaptation of the requirements provided by RTS 13 for the management of incomplete or potentially erroneous information by APAs. Just as APAs ensure the accuracy and integrity of trade reports received from investment firms, CTPs are tasked with maintaining the quality of trade data received from trading venues and APAs.
88. It should be noticed that RTS 13 is in the process of being reviewed. The above-mentioned requirements concerning the management of data quality issues were contained in Article 10 of RTS 13 and were applicable both to CTPs and APAs. In light of a revision of the legal mandate triggered by the MiFIR review, Article 10 will not apply to CTPs anymore, whereas the data quality requirements for APAs are contained in the Article 9 of the proposed new RTS 13.
89. The proposal of data quality measures to be adopted by the CTPs is outlined in Article 10 of the draft RTS on CTP input/output data. The main aspects covered by this article are explained in the following sub-sections.

3.2.3.2 Input data quality

3.2.3.2.1 Completeness, format, plausibility, and timeliness checks

90. To ensure the quality of input data received from data contributors, CTPs must implement robust methods and arrangements. These measures encompass a comprehensive approach to data quality assurance, including format adherence, completeness and timeliness checks, as well as identification of potential erroneous trades through outlier detection methodologies.
91. **Completeness checks:** The first step in ensuring input data quality involves conducting completeness checks to ensure that all required data fields are present and accurately populated. This includes verifying the presence of essential information such as trade identifiers, timestamps, instrument identifiers, and transaction details, among others. Any missing or incomplete data must be identified promptly to maintain the integrity of the dataset.
92. **Format adherence checks:** Following the execution of completeness checks, the CTP is tasked with verifying adherence of the information transmitted by data contributors to prescribed formats outlined in relevant regulatory technical standards, notably RTS 1 and RTS 2 for core market data, and RTS on CTP input/output data for regulatory data. CTPs must validate that data received from data contributors are populated in the respective fields according to the specified formats.
93. **Identification of erroneous trades:** In addition to format and completeness checks, CTPs shall employ robust outlier detection methodologies to identify potential erroneous trades within the input data. This involves analysing price and volume information to detect anomalies that deviate significantly from expected market values. By applying statistical techniques and automatic alerting, CTPs can identify and flag potentially erroneous trades for further investigation and corrective action.
94. **Timeliness checks:** CTPs monitor the timeliness of data submissions from data contributors, assessing whether data are transmitted within the real-time requirement outlined by Article 3 (please see section 3.2.2.13.2.2.1). The primary purpose of executing these checks is to identify serious or repeated breaches of timeliness requirements, and to inform the concerned data contributors. Instances of severe non-compliance of timeliness requirements should be addressed according to the enforcement standards adopted by the CTPs, which are further elaborated in section 3.2.3.2.2).

3.2.3.2.2 Cooperation arrangements with data contributors and enforcement standards

95. In addition to the execution of the data quality checks outlined in the previous section, the CTPs must have in place also well-defined cooperation arrangements with data contributors. These arrangements enable prompt resolution of data quality issues by

fostering collaboration between all the parties involved in the process of transmitting and receiving input data, thereby enhancing the overall quality and reliability of the data disseminated by the CTPs. Furthermore, enforcement standards play a crucial role in improving the effectiveness of the data quality assurance process. By establishing clear enforcement mechanisms and consequences for non-compliance with data quality standards, CTPs can create a framework that ensures data contributors consistently adhere to reporting requirements and maintain high standards of data quality.

96. **Cooperation arrangements with data contributors:** Effective communication between CTPs and data contributors is critical for ensuring the accuracy and integrity of input data and facilitating collaboration in the data transmission process. CTPs shall establish formal communication channels with data contributors to facilitate the exchange of information and feedback, and to promptly achieve the resolution of confirmed data quality issues. The cooperation arrangements between CTPs and data contributors includes:
- *Confirmation of receipt:* CTPs must promptly confirm the receipt of data from contributors, providing acknowledgment of successful transmission. This confirmation ensures transparency and reassures data contributors that their submissions have been received and are being processed.
 - *Flagging data quality issues:* In cases where data quality issues are identified, CTPs must immediately notify data contributors, flagging specific discrepancies or errors observed in the submitted data. This proactive approach allows data contributors to address issues promptly and ensures the timely resolution of data quality concerns.
 - *Confirmation of data quality issues and resubmission:* Upon receiving notification of a data quality issue, data contributors are expected to acknowledge the issue and, if necessary, initiate the process of resubmitting corrected data.
97. **Enforcement standards:** In addition to formal communication channels with data contributors, CTPs shall establish a robust enforcement framework to ensure that data quality issues are not only properly communicated, but also promptly and effectively resolved. These enforcement standards encompass policies and procedures outlining the steps CTPs can take to demand data contributors to address and resolve data quality issues in a timely manner, whose non-compliance would lead to penalties or other remediation actions. Since CTPs are not supposed to directly correct erroneous trades, except for exceptional circumstances when data contributors are unable to do so for technical reasons, it is necessary that the procedures to enforce the compliance with data quality requirements are acknowledged and adhered to by all participants involved in the data transmission process.
98. As mandated by MiFIR, CTPs have two primary tools at their disposal for contributing to the achievement of high data quality standards:

- Temporary suspension of revenue redistribution [Article 27h(8)(c)]: CTPs may temporarily suspend the redistribution of revenue to data contributors who fail to comply seriously and repeatedly with data quality requirements. The criteria and conditions under which the CTPs can apply or suspend this measure are specified in Articles 7,8 and 9 of the RTS developed by ESMA according to Article 27h(8) of MiFIR (RTS on revenue redistribution).
- Notification to the competent authority [Article 22a(8)]: In cases where the CTP deems the quality of the data to be inadequate, the competent authority of the data contributor should be promptly notified by the CTP. This notification aims to facilitate an assessment of the need for initiating supervisory measures to rectify data quality issues.

99. The proposed approach in this draft RTS is to mandate CTPs to comprehensively articulate and document the procedures triggering these two tools. Additionally, CTPs are required to make these documented procedures publicly available, enhancing transparency and accountability in the enforcement of data quality standards.

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

3.2.3.3 Output data quality

100. Similarly to data quality requirements prescribed by RTS 13 to APAs, CTPs shall employ three essential mechanisms to ensure the reliability and accuracy of output data disseminated to market participants:
- **Continuous real-time monitoring of IT systems:** CTPs continuously monitor the performance of their IT systems in real-time to ensure that the information they have received from data contributors have been successfully published. This proactive monitoring allows CTPs to promptly identify any technical issues or discrepancies in the publication process, ensuring the timely and accurate dissemination of market data to end-users.
 - **Periodic data reconciliations:** CTPs should perform periodic reconciliations between the trade reports they receive from data contributors and the trade reports that they publish. This involves verifying the correct publication of information by comparing the data received with the data disseminated to market participants. By conducting regular reconciliations, CTPs will be able to detect and rectify any inconsistencies or errors in the published data.
 - **Feedback channels from data users:** CTPs should establish a communication channel with their clients with the aim to gather direct input from data users regarding the quality and accuracy of the disseminated market data.

101. Continuous IT capacity monitoring and periodic reconciliations are integral components of the data quality assurance process employed by CTPs. Practical aspects of these mechanisms shall be internally documented as methods and arrangements to ensure data quality, whose appropriateness is an assessment criterion in the context of CTP selection (pursuant to Article 27da(2)(f) of MiFIR). Upon selection and authorisation, the CTPs should ensure compliance on a continuous basis with these methods and arrangements. This should ensure that CTPs adhere to robust standards for data quality assurance.
102. Additionally, pursuant to Article 27ha of MiFIR, CTPs are required to annually publish on their website performance statistics and incident reports relating to data quality and data systems. The content and format of these reports will be specified by ESMA through a separate RTS. This requirement for transparency regarding CTPs' data quality performance and incident management aims to foster strict application of the mentioned methods and arrangements to ensure quality of the disseminated data.

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

4 RTS on the revenue distribution scheme of CTPs

103. The revenue redistribution scheme is a key element for the success of the consolidated tape provider (CTP) for shares and ETFs.
104. According to paragraph 5 of Article 27h of MiFIR part of the revenues generated by the CTP for shares and ETFs shall be redistributed as indicated in the reasoned decision referred to in Article 27db(3) of MiFIR, to data contributors meeting one or more of the three criteria ("revenue distribution scheme") for which ESMA has to specify the weighting and the methodology in the draft RTS, as mandated in Article 27h(8)(a) and (b) of MiFIR. Furthermore, ESMA has to specify the criteria under which the CTP can suspend the participation of a data contributor in the revenue redistribution scheme as well as the conditions to resume the application of such scheme, as mandated in Article 27h(8)(c) of MiFIR.
105. Section 4.1 provides an analysis of the mandate under Article 27h(8)(a) and (b) of MiFIR while section 4.2 analyses the mandate under Article 27h(8)(c) of MiFIR. Annex III includes the draft RTS reflecting the proposals from those sections.

4.1 Mandate under Article 27h(8)(a) and (b) of MiFIR

4.1.1 Mandate

Article 27h of MiFIR

8. ESMA shall develop draft regulatory technical standards to:

- (a) specify the weighting assigned to each criterion laid down in paragraph 6;
- (b) further specify the method for calculating the amount of the revenue to be redistributed to data contributors as referred to in paragraph 7, second subparagraph.

[...]

For the purposes of the first subparagraph, point (a), of this paragraph, the criterion laid down in paragraph 6, point (a), shall have a higher weighting than the criterion laid down in point (b) of that paragraph, and the criterion laid down in point (b) of that paragraph shall have a higher weighting than the criterion laid down in point (c) of that paragraph.

ESMA shall submit the draft regulatory technical standards referred to in the first subparagraph to the Commission by 29 December 2024.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

106. As mentioned above, Article 27h(8)(a) and (b) of revised MiFIR mandate ESMA to develop draft RTS to specify the weighting and the general methodology which a CTP should use to calculate the amount of revenues to be distributed to data contributors.
107. Recitals 18 and 29 of the MiFIR review highlight the key role of small regulated markets and SME Growth Markets ('small trading venues'), including their listing activities, as well as of pre-trade transparent order books in the price formation process. Therefore, small trading venues which decide to opt-in and transmit data to the CTP as well as transparent trading venues contributing to the admission of trading should be recompensated for their contribution to the CTP. The criteria and the main elements of the "revenue distribution scheme" are provided in Level 1 and summarised in Table 3 below. More specifically, the revised MiFIR defines the three criteria that the CTP should use to redistribute the revenues, their level of importance to be considered by ESMA to determine the related weights as well as the corresponding measure of volume generated by the data contributor to be multiplied by the weight.

Table 3: Main elements of the revenue distribution scheme

CRITERION as defined in Article 27h(6) of MiFIR		WEIGHT	RELEVANT TRADING VOLUME
#1	SMALL TRADING VENUE – "(a) the data contributor is a regulated market or an SME growth market whose annual trading volume of shares represents 1 % or less of the annual trading volume of shares in the Union ("small trading venue")"	According to the mandate in Article 27h(8) of MiFIR such criterion shall have the highest weight	Article 27h(7) of MiFIR determines that the weight of this parameter shall be multiplied by the total annual trading volume generated by that trading venue
#2	YOUNG INSTRUMENTS – "(b) the data contributor is a trading venue that provided initial admission to trading of shares or ETFs on 27 March 2019 or thereafter"	According to the mandate in Article 27h(8) of MiFIR such criterion shall have the second highest weight	The relevant trading volume to use shall be: (i) in the case of small trading venues, their total annual trading volume; (ii) in the case of trading venues other than small trading venues, the trading volume pertaining to the shares and ETFs referred to in point (b) of paragraph 6 of Article 27h.
#3	PRE-TRADE TRANSPARENT TRADING VENUE – "(c) the data are transmitted by a trading venue and pertain to transactions in shares and ETFs that have been concluded on a trading system that provides pre-trade transparency, where those transactions did not result from orders that were subject to a	According to the mandate in Article 27h(8) of MiFIR such criterion shall have the lowest weight	The relevant trading volume to use shall be the volume pertaining to transactions in shares and ETFs concluded on a trading system that provides pre-trade transparency per the terms in point (c) of Article 27h(6) of MiFIR.

	<p><i>waiver from pre-trade transparency pursuant to Article 4(1), point (c) of MiFIR.</i></p>		
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4.1.2 Analysis and proposal

4.1.2.1 Methodology

4.1.2.1.1 Availability of information

108. Before defining the weights, ESMA has identified certain elements to identify the steps to follow determining the amount of revenues that each data contributor should receive.
109. Firstly, any computational steps should be made with reference to the revenues of the CTP to be redistributed and it is considered that such amount should be determined by the CTP itself on the basis of its total revenues.
110. Secondly, based on the lists published by ESMA, the CTP has to determine if a trading venue (at the level of either segment or operating MIC) meets any of the three criteria to receive part of its revenues. In particular, to identify the data contributors the CTP shall use: (i) the lists of regulated markets and multilateral trading facilities (MTFs) including that of small and medium enterprises (SMEs) growth markets published according to Articles 56, 18(10) and 33(6) of MiFID II, and (ii) the list of data contributors that are not required to transmit data to the CTP and those opting-in published under Article 22a(4) of MiFIR. ESMA will determine such list before the start of the CTP operations and update it on a recurrent basis. Further details on how ESMA can determine such list can be found in section 4.1.2.1.5.
111. Table 4 below analyses the availability of the necessary information to the CTP to assess if a data contributor meets any of the three criteria. However, before moving to this assessment, it is important to consider the notion of a trading venue. In general, trading venues are identified by MICs which can be operating and segment MICs. Those MICs are currently structured differently across groups and trading venues. In most cases, the operating MIC refers to a trading venue while the segment MIC to a trading system or dedicated segment of the venue.
112. On this basis, doing the calculations at the segment MIC level, both for the identification of the trading venue, the assessment of the criteria and the distribution of revenues, should avoid the issue of the correct determination of the proper MIC to use for such purposes. However, this approach might be too granular for criterion 1 and result in a very high number of trading venues eligible to this criterion. Therefore, ESMA considers using the operating MIC for the calculations for criterion 1 (see section 4.1.2.1.5 and Annex V). ESMA seeks the views from market participants on the proper identification of a trading venue and group.

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?

Table 4: Availability of the information to the CTP

CRITERION as defined in Article 27h(6) of MiFIR	RELEVANT TRADING VOLUME	AVAILABILITY OF INFORMATION
#1 SMALL TRADING VENUE - <i>“(a) the data contributor is a regulated market or an SME growth market whose annual trading volume of shares represents 1 % or less of the annual trading volume of shares in the Union (“small trading venue)”</i>	Article 27h(7) of MiFIR determines that the weight of this parameter shall be multiplied by the total annual trading volume generated by that trading venue	<p><i>Can the CTP know if the SME/ regulated market is a small trading venue? Does the CTP have information on the total annual trading volume of a trading venue?</i></p> <p>According to Articles 56 and 33(6) of MiFID II, ESMA shall publish, and keep up to date, the list of regulated markets and SME growth markets. Therefore, this information is publicly available. Furthermore, Article 18(10) of MiFID II requires ESMA to publish and keep up to date, the list of MTFs which is necessary for criteria #2 and #3. However, ESMA needs to ensure that both, the operating and the segment MICs are available in those lists.</p> <p>The total annual trading volume of the trading venue as well as the annual trading volume of shares of the same trading venue is information that the CTP receives from the data contributors.</p> <p>The annual trading volume of shares in the Union is also an information available to the CTP since it receives the data from both trading venues (on-venue transactions) and APAs (off-venue transactions).</p> <p>As a result, the CTP has all the information to define if a venue meets the small trading venue criterion.</p>

CRITERION as defined in Article 27h(6) of MiFIR		RELEVANT TRADING VOLUME	AVAILABILITY OF INFORMATION
#2	YOUNG INSTRUMENTS – “(b) the data contributor is a trading venue that provided initial admission to trading of shares or ETFs on 27 March 2019 or thereafter”	<p>The relevant trading volume to use shall be:</p> <p>(i) in the case of small trading venues, their total annual trading volume;</p> <p>(ii) in the case of trading venues other than small trading venues, the trading volume pertaining to the shares and ETFs referred to in point (b) of paragraph 6 of Article 27h.</p>	<p><i>Can the CTP know if a data contributor has young instruments? Does the CTP have information on the trading volume of a trading venue pertaining to those instruments?</i></p> <p>As mentioned in the analysis for the first criterion, data related to the annual trading volume is available to the CTP.</p> <p>As far as the determination of young instruments is concerned, the necessary information to assess this criterion is the date of initial admission to trading of shares or ETFs.</p> <p>This information is available in the Financial Instruments Reference Database (FIRDS). However, in the case of multi-listed instruments, the determination of the venue with initial admission of trading might not be a straightforward exercise due to data quality issues. As a result, in the upcoming CP on RTS 1¹², ESMA will consult on adding an additional field in RTS 23 reference data to be reported to ESMA defining the trading venue where the initial public offering (IPO) occurred. This should increase the level of data quality and certainty of the correct identification of such venue.</p> <p>Therefore, it considered that two alternatives are viable options, under option (A) the CTP could use FIRDS data while under option (B) the CTP could collect this information on a per ISIN and trading venue basis (this would require the inclusion of this information in the input / output data RTS). ESMA seeks views from stakeholders on what could be the most appropriate solution for the success of the CTP.</p>
#3	PRE-TRADE TRANSPARENT TRADING VENUE – “(c)	The relevant trading volume to use shall be the volume pertaining to transactions in	<i>Can the CTP know if a data contributor has recorded pre-trade transparent volume?</i>

¹² This CP is expected to be published at the beginning of Q3 2024.

CRITERION as defined in Article 27h(6) of MiFIR	RELEVANT TRADING VOLUME	AVAILABILITY OF INFORMATION
<p><i>the data are transmitted by a trading venue and pertain to transactions in shares and ETFs that have been concluded on a trading system that provides pre-trade transparency, where those transactions did not result from orders that were subject to a waiver from pre-trade transparency pursuant to Article 4(1), point (c).</i></p>	<p>shares and ETFs concluded on a trading system that provides pre-trade transparency per the terms in point (c) of Article 27h(6) of MiFIR.</p>	<p>Since According to Article 22b of MiFIR, the data transmitted to the CTP shall comply with RTS 1 unless provided otherwise (in the input/output data RTS), the CTP receives the flags assigned to each transaction. Therefore, through the flag RFPT it is known if the trade was executed in a reference price system and through the flags NLIQ, OILQ and PRIC if the transaction was negotiated. However, it is not known if the transaction benefitted from a large in scale (LIS) waiver (pre-trade LIS). Indeed, the flag in the current RTS 1, which is used as a basis to define the input data to be transmitted to the CTP, indicates if the transaction was subject to the LIS deferral (post-trade LIS) which is of a different size. As a result, a new flag to define if a transaction was subject to the LIS waiver should be included in the input/output data RTS so that the CTP can collect (and not publish) this information to perform the calculations. ESMA appreciates that this approach might be cumbersome and subject to errors when transactions are flagged. Therefore, ESMA seeks views if alternative solutions are viable and sufficiently accurate.</p>

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

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.

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.

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.

4.1.2.1.2 From weights to monetary amounts to percentages

113. To determine the amount of revenues that each contributor should receive, Level 1 requires that the weight has to be multiplied by a measure of trading volume which is differently defined for each criterion. In order to avoid that such value in monetary amount might be larger than the total amount to be redistributed, ESMA suggests converting those values into percentages.
114. The example below provides a mere illustration of the conversion of the values into percentages and their application to the volume amounts for the determination of the final monetary amount to be distributed to the data contributor. In the example, the percentages are obtained from dividing each monetary amount (resulting from the sum of all monetary amounts obtained by the multiplication of the weight times the volume measure for each criterion for the same trading venue) by the sum of all resulted monetary amounts (equal to EUR 35,300,000 in the example below).

Example #1

Amount of revenues of the CTP to redistribute as determined by the CTP: EUR 50,000

Weight for criterion #1 – small trading venue: 6

Weight for criterion #2 – young instruments: 3

Weight for criterion #3 – pre-trade transparent system: 1

Step #1 – Multiplication of the weight times the trading volume, per criterion and trading venue

	Total annual trading volume traded	Total annual trading volume in young instruments	Pre-trade transparent volume	Result of the multiplication of the weight by the volume			Totals per venue (a) + (b) + (c)
				(a) Small trading venue	(b) Young instruments	(c) Pre-trade transparent system	
TV A transparent SME with young instruments	€ 500,000	NA ¹³	€ 500,000	€ 500,000 x 6 = € 3,000,000	€ 500,000 x 3 = € 1,500,000	€ 500,000 x 1 = € 500,000	€ 5,000,000
TV B partially transparent SME and with young instruments	€ 600,000	NA ¹⁴	€ 400,000	€ 600,000 x 6 = € 3,600,000	€ 600,000 x 3 = € 1,800,000	€ 400,000 x 1 = € 400,000	€ 5,800,000
TV C MTF with young instruments and 50% transparent	€ 8,000,000	€ 1,000,000	€ 4,000,000		€ 1,000,000 x 3 = € 3,000,000	€ 4,000,000 x 1 = € 4,000,000	€ 7,000,000
TV D RM with young instruments and mostly dark	€ 20,000,000	€ 5,000,000	€ 500,000		€ 5,000,000 x 3 = € 15,000,000	€ 500,000 x 1 = € 500,000	€ 15,500,000
TV E RM with some transparency	€ 50,000,000	€ -	€ 2,000,000		€ -	€ 2,000,000 x 1 = € 2,000,000	€ 2,000,000
TOTAL				€ 6,600,000	€ 21,300,000	€ 7,400,000	€ 35,300,000

¹³ For small venues this trading volume is not calculated since the annual trading volume is used instead for criterion #2.

¹⁴ For small venues this trading volume is not calculated since the annual trading volume is used instead for criterion #2.

Step #2 – Transformation of resulting values into percentages and calculation of the amount to be redistributed

	Share of revenues to distribute per venue (a) + (b) + (c)	Total amount of CTP revenues received by each venue
TV A SME	$€ 5,000,000 \div 35,300,000 = 14.16\%$	$€ 50,000 \times 14.16\% = € 7,082.15$
TV B SME	$€ 5,800,000 \div 35,300,000 = 16.43\%$	$€ 50,000 \times 16.43\% = € 8,215.29$
TV C	$€ 7,000,000 \div 35,300,000 = 19.83\%$	$€ 50,000 \times 19.83\% = € 9,915.01$
TV D	$€ 15,500,000 \div 35,300,000 = 43.91\%$	$€ 50,000 \times 43.91\% = € 21,954.67$
TV E	$€ 5,000,000 \div 35,300,000 = 5.76\%$	$€ 50,000 \times 5.76\% = € 2,832.86$
TOTAL		€ 50,000

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

4.1.2.1.3 Calculation of the trading volumes

115. To calculate the amount of revenue to distribute, the weights have to be multiplied by relevant trading volumes defined in Level 1. Two types of trading volumes have to be used:
- For criteria #1 and #2: the total trading volume (either at trading venue level or at EU level, either for all or certain instruments);
 - For criterion #3: the pre-trade transparent trading volume.
116. To avoid an inconsistent approach in the calculations, ESMA considers it important to clarify the type of transactions to include or exclude from the calculations of those volumes. More specifically, Table 5 below provides a proposal on the list of transactions to include, exclude, add and subtract for each type of volume and criterion on the basis of the list of flags to be used for the purpose of post-trade transparency set in Table 4 of Annex I of RTS 1. More specifically, considering that the revenue distribution framework also aims at rewarding those venues providing liquidity and transparency, it is considered that to genuinely reward price forming volume, only the volume from those transactions is relevant for the determination of the total volume. Finally, when a transaction is flagged with several flags, if one of them requires exclusion from the calculations, such flag should prevail for the purposes of calculating the turnover for the criterion.

Table 5: transactions to include or exclude for each criterion

	Criteria #1 and #2 Total trading volume (either at trading venue level or at EU level, either for all or certain instruments)	Criterion #3 Pre-trade transparent trading volume
all transactions with no flag as provided in Table 4 of Annex I of RTS 1	included	included
non-price forming transactions flagged with ("NPFT")	excluded	excluded
contingent transactions flagged with ("CONT")	excluded	excluded
agency cross transactions flagged with ("ACTX")	included	included
reference price transactions flagged with ("RFPT")	included	excluded

negotiated transactions in liquid financial instruments flagged with ("NLIQ")	included	excluded
negotiated transactions in illiquid financial instruments flagged with ("OILQ")	included	excluded
negotiated transactions subject to conditions other than the current market price flagged with ("PRIC")	included	excluded
transactions above the pre-trade LIS flagged with ("NTLS")	included	excluded
benchmark transactions flagged with ("BENC")	included	included
portfolio transactions flagged with ("PORT")	included	included
special dividend transactions flagged with ("SDIV")	included	included
post-trade large in scale transactions flagged with ("LRGS")	included	included
algorithmic transactions flagged with ("ALGO")	included	included
transactions above the standard market size flagged with ("SIZE")	included	included
illiquid instrument transactions flagged with ("ILQD")	included	included
Cancelled transactions with and without cancellation ("CANC") flag	subtracted	subtracted
Amended transactions with amendment ("AMND") flag	added	added

117. The flag "NTLS" should be provided when reporting data to the CTP as it will be provided in the Table 2 Annex III of the input / output data RTS [the CP with this RTS for the equity CTP will be published in Q3 2024].

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.

4.1.2.1.4 Frequency of the revenue distribution scheme

118. One important element of the revenue distribution scheme is its frequency. Even if the monetary amounts (i.e. weights multiplied by trading volumes) to be transformed into percentages are defined annually, nothing prevents the revenue redistribution to operate on a different frequency basis.
119. ESMA initially considered specifying the frequency of the revenue redistribution. However, this specification appears not to be covered by the scope of the mandate for ESMA to develop RTS. Without any prejudice to that, ESMA stresses the need for future CTPs to thoroughly analyse this topic and reflect on the possible consequences of different frequencies and methods of the revenue redistribution scheme since this will have an impact on the whole revenue redistribution scheme.
120. ESMA considers that the frequency of revenue redistribution plays an important role in the determination of a high level of data quality. Certainly, a more frequently and granular revenue distribution would allow the CTP to promptly suspend the scheme in the case of low data quality. However, a too granular frequency might become too cumbersome to operate and it might require many adjustments of the revenues distributed when the regime is based on effective eligibility instead of expected eligibility. Indeed, in this context there might be the need for a fallback clause to take into account possible corrections after the distribution of the revenues. In the case of a regime based on estimated eligibility instead, a balance adjustment would be necessary. Finally, it has to be noted that, on the basis of the regime chosen, there might be the need for an ad-hoc regime for the first year of the operations of the CTP.
121. In conclusion, ESMA would consider that distribution of revenues at least on an annual basis based on estimated eligibility with a periodic balance adjustment seems a good basis.

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.

4.1.2.1.5 Determination of the list of data contributors

122. According to Article 22a(4) of MiFIR ESMA shall publish on its website and keep up to date a list of investment firms operating SME growth markets and market operators that meet the conditions to not be required to transmit data to the CTP, indicating which of them have decided to opt-in. For convenience the legal text of the provision is reported in the grey box below.

Article 22a(4) of MiFIR

An investment firm operating an SME growth market, or a market operator, whose annual trading volume of shares represents 1 % or less of the annual trading volume of shares in the Union shall not be required to transmit its data to the CTP where:

(a) that investment firm or market operator is not a part of a group comprising or having close links with an investment firm or a market operator whose annual trading volume of shares represents more than 1 % of the annual trading volume of shares in the Union; or

(b) the regulated market or SME growth market operated by that investment firm or market operator accounts for more than 85 % of the annual trading volume of shares that were initially admitted to trading on that regulated market or SME growth market.

123. As a result, to determine if a trading venue is not required to transmit data to the CTP certain information has to be collected and analysed. Table 6 below assesses the availability of the information necessary to ESMA do define the list.

Table 6: Availability of the information to ESMA

NECESSARY INFORMATION		AVAILABILITY OF INFORMATION
#1	If the venue is an SME GM	According to Articles 56 and 33(6) of MiFID II, ESMA shall publish, and keep up to date based on notification from NCAs, the list of regulated markets and SME growth market. Therefore, this information is available to ESMA.
#2	The trading volume of shares of the venue	This information should be sent to ESMA for both the transparency calculations and the DVC. Therefore, this information is available to ESMA through the Financial Instruments Transparency System (FITRS) and the DVC systems. However, it might benefit from an analysis of consistency with the data sent to the CTP.
#3	The annual trading volume of shares in the Union	This information should be sent to ESMA (FITRS) for the purpose of the transparency calculations. Therefore, this information is available to ESMA. However, it might benefit from an analysis of consistency with the data sent to the CTP.
#4	If the investment firm or market operator is not a part of a group comprising or having close links with an investment firm or a market operator whose annual trading volume of shares represents more than 1 % of the annual trading volume of shares in the Union	Information on trading volume is available in FITRS but information on being part of a group or having close links is currently not available to ESMA. To overcome this issue a dedicated field could be added in the ESMA Register of Entities. However, information on the “close links” is still missing. Therefore, ESMA seeks the view of stakeholders on how to address this issue.

NECESSARY INFORMATION		AVAILABILITY OF INFORMATION
#5	The annual trading volume of shares of the group	If information (#4) is known, this amount can be calculated.
#6	The annual trading volume of shares that were initially admitted to trading on that regulated market or SME growth market	As mentioned above, trading volume is available in FITRS and information on where the instrument is initially admitted to trading is available in FIRDS. In the case of multi-listed instruments, the determination of the venue with initial admission of trading might not be a straightforward exercise. However, it might benefit from an analysis of consistency with the data sent to the CTP.

124. In performing a simulation with data sent to FITRS, ESMA identified 171 segment MICs offering for trading shares or ETFs in 2023 and on that basis, 47 Groups were identified.

125. It has to be considered that such list shall be kept up to date. However, considering that annual trading volumes shall be used for the determination of mandatory contribution by a trading venue, it can 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. Furthermore, the list will be updated annually by 15 January each year for new incumbents not part of the group and every year thereafter if they are not obliged to contribute. Those obliged to contribute at the beginning of the operations of the CTP and which, will be in the first list that ESMA published, will be revised after five years. A list can be found in Annex V.

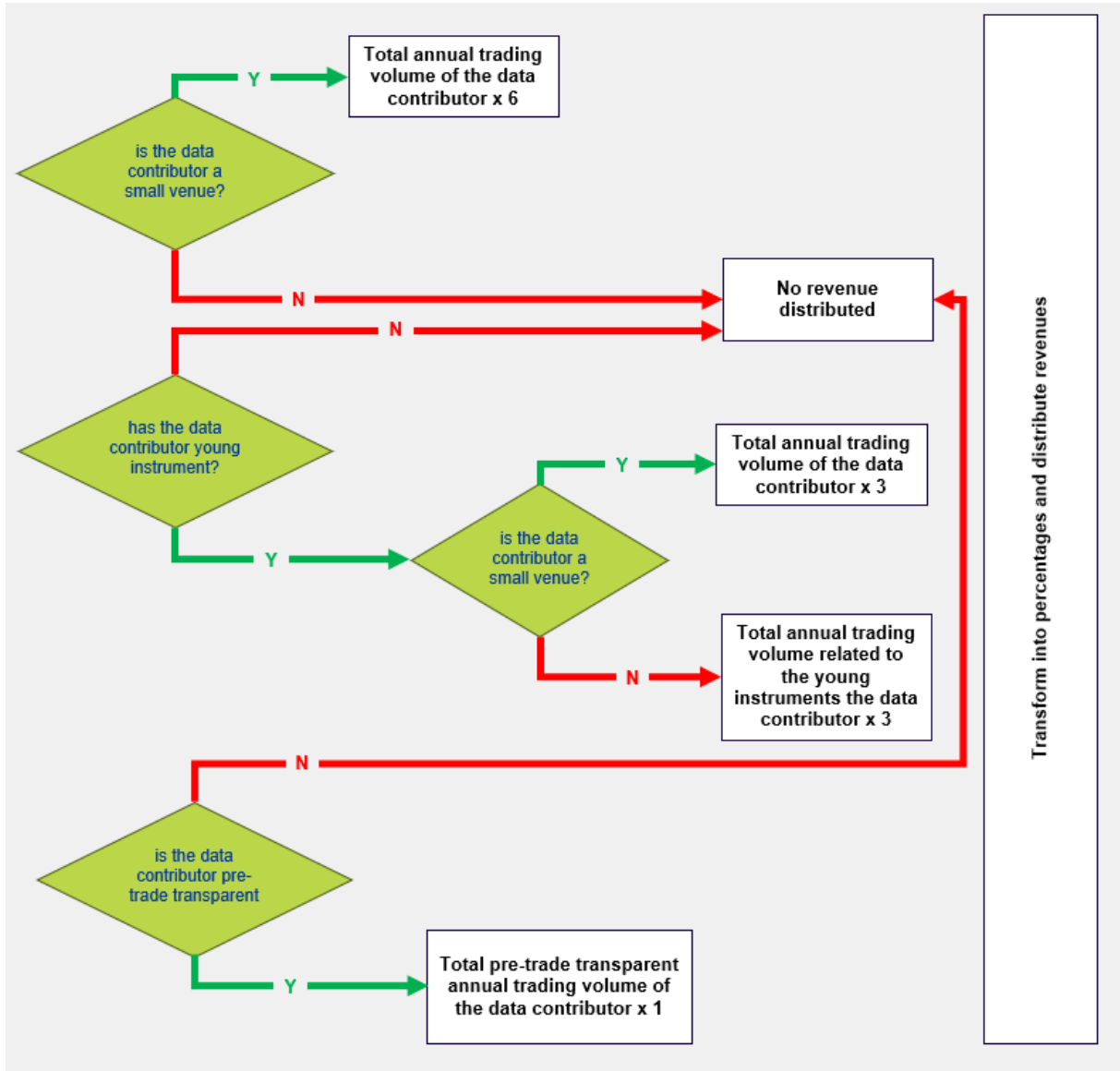
Q25: Do you agree with the proposed timeline for the update of the list of data contributors and the identified issues? How could the issues be solved? Please explain.

4.1.2.1.6 Transitional provisions

126. The CTP might start its operations during any point in time of the year. Therefore, despite that ESMA can provide the list of data contributors, including those opting in, before the start of its operation, the CTP does not have the necessary one year of trading data of the contributors. Therefore, relevant transitional provisions might be necessary to ensure a smooth transition at the beginning of the operations of a CTP. In this context, ESMA seeks view on the possible issues that the CTP might face during the first year of operation and related solutions.

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.

Figure 1: Determination of the amount of revenues allocated to each data contributor



4.1.2.2 Weighting assigned to each criterion

4.1.2.2.1 Weights

127. Three weights have to be determined by ESMA and, each of them has to be applied to the relevant criterion. Level 1 clarifies the criteria and their order of relevance:
- SMALL TRADING VENUE – the weight assigned to this criterion should be the highest and should apply to a data contributor which is a regulated market or an SME growth market whose annual trading volume of shares represents 1 % or less of the annual trading volume of shares in the Union (“small trading venue”);
 - YOUNG INSTRUMENTS – the weight assigned to this criterion should be the second highest and should apply to a data contributor which is a trading venue that provided initial admission to trading of shares or ETFs five years before the date of entry into force of the MiFIR review or thereafter;
 - PRE-TRADE TRANSPARENT TRADING VENUE – the weight assigned to this criterion should be the lowest and pertains to transactions in shares and ETFs that have been concluded on a trading system that provides pre-trade transparency (i.e. those are neither referenced price transactions nor are negotiated transactions) and where those transactions did not result from orders that were subject to the large in scale (LIS) waiver.
128. If a trading venue meets more than one of the criteria above, the amounts resulting from the above calculations are added cumulatively as presented in example #1. However, it is also implicit from the text that if none of the criteria are met, the venue will not benefit from revenue distribution.
129. To define the weights a second example (#2) is provided to simulate the effects of the different options. To see the effects of the different weights, five trading venues with the following characteristics are used: one transparent SME growth market with young instruments and one transparent SME growth market without young instruments (TV A and B respectively) and three other trading venues without young instruments, a dark MTF (TV C), a partially transparent MTF (TV D) and a partially transparent regulated market (TV E).
130. The optimal set of weights should be the one maximising the revenues received by the trading venue meeting all criteria (i.e. TV B) in relative terms across the different scenarios and compared with itself.
131. In addition, the simulations use weights summing to 10 (equivalently, percentages summing to 100%). To ease the comparison of the different options, the weights and the related percentages are provided in Table 7. The scenarios presented cover all

possible options with weights summing to 10 and meeting the Level 1 criterion of importance of the weighting (i.e. the requirement to assign the highest weight to the first criterion and the lowest weight to the third one). Finally, the weight assigned to the third criterion is never set to 1 to ensure that such weight has a certain relevance and is not assigned an entry level weight.

132. All scenarios are based on the same set of trading venues presented in Table 8 and, in all cases, the amount of revenues of the CTP to redistribute (as determined by the CTP) is EUR 50,000.
133. Finally, in Annex IV all calculations related to the charts of scenarios A, B, C, D and E are presented. The charts below provide a visualisation of the revenue distribution to each trading venue in the example under each scenario.

Example #2

Table 7: Scenarios of weights and related percentages tested

	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E
SMALL TRADING VENUE	6.5 (65%)	5.5 (55%)	6.0 (60%)	5.0 (50%)	4.5 (45%)
YOUNG INSTRUMENTS	2.0 (20%)	3.0 (30%)	2.5 (25%)	3.5 (35%)	4.0 (40%)
PRE-TRADE TRANSPARENT TRADING VENUE	1.5 (15%)	1.5 (15%)	1.5 (15%)	1.5 (15%)	1.5 (15%)

Table 8: Scenarios of trading venues tested

		Total annual trading volume traded	Total annual trading volume in young instruments	Pre-trade transparent volume
TV A SME	Transparent SME without new instruments	€ 800,000	NA	€ 800,000
TV B SME	Transparent SME with new instruments	€ 800,000	NA	€ 800,000
TV C	Dark MTF	€ 1,600,000,000	€ -	€ -
TV D	Partially transparent MTF	€ 2,000,000	€ -	€ 100,000
TV E	Partially transparent RM	€ 1,600,000,000	€ -	€ 320,000,000

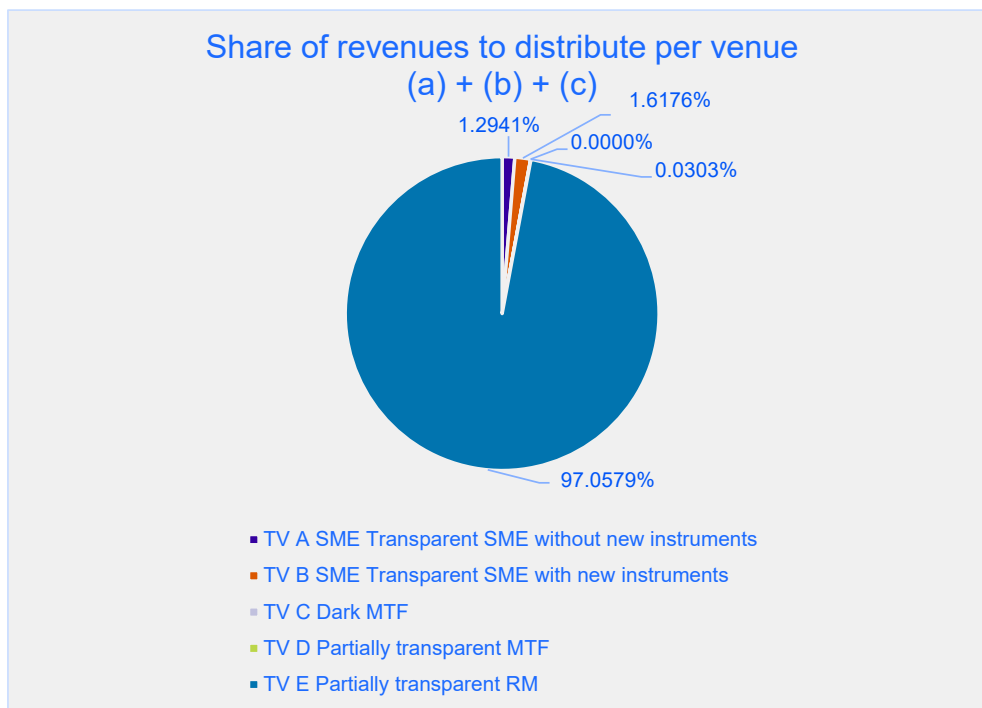
Figure 2: Scenario A


Figure 3 Scenario B

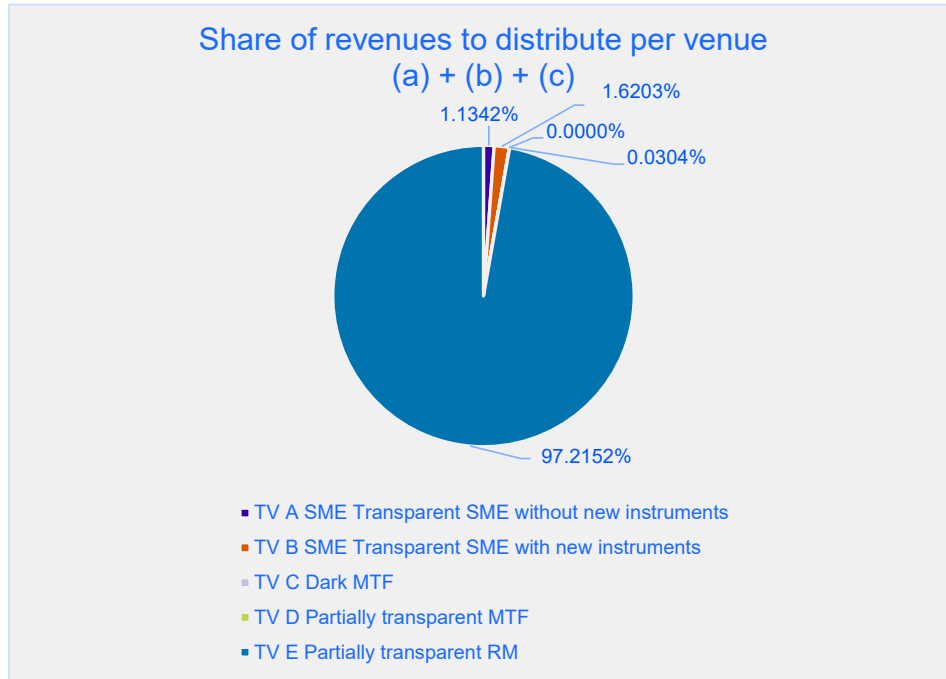


Figure 4: Scenario C

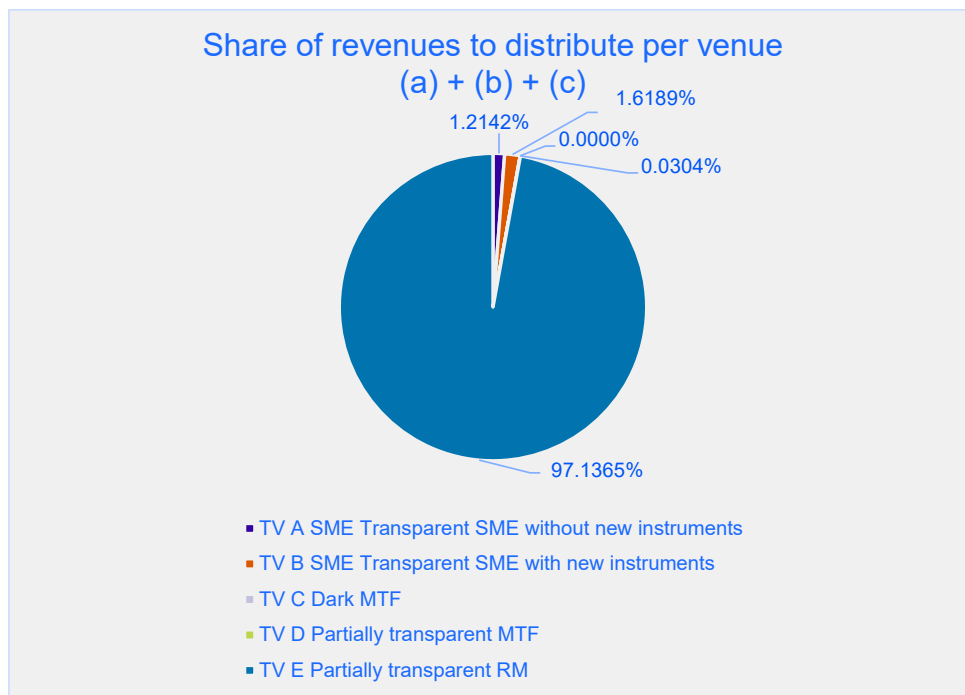


Figure 5: Scenario D

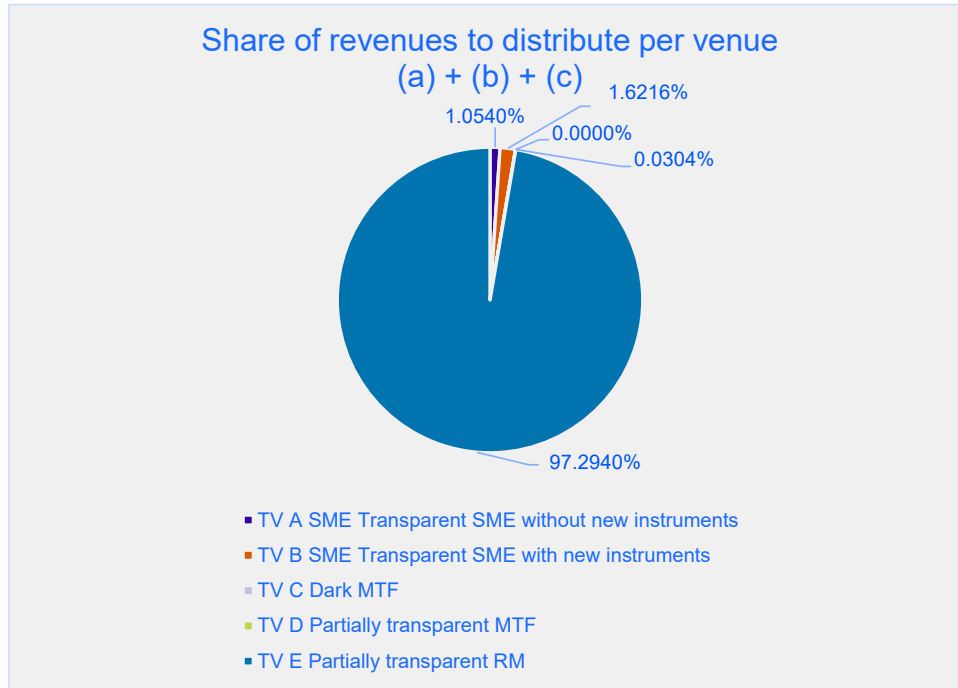
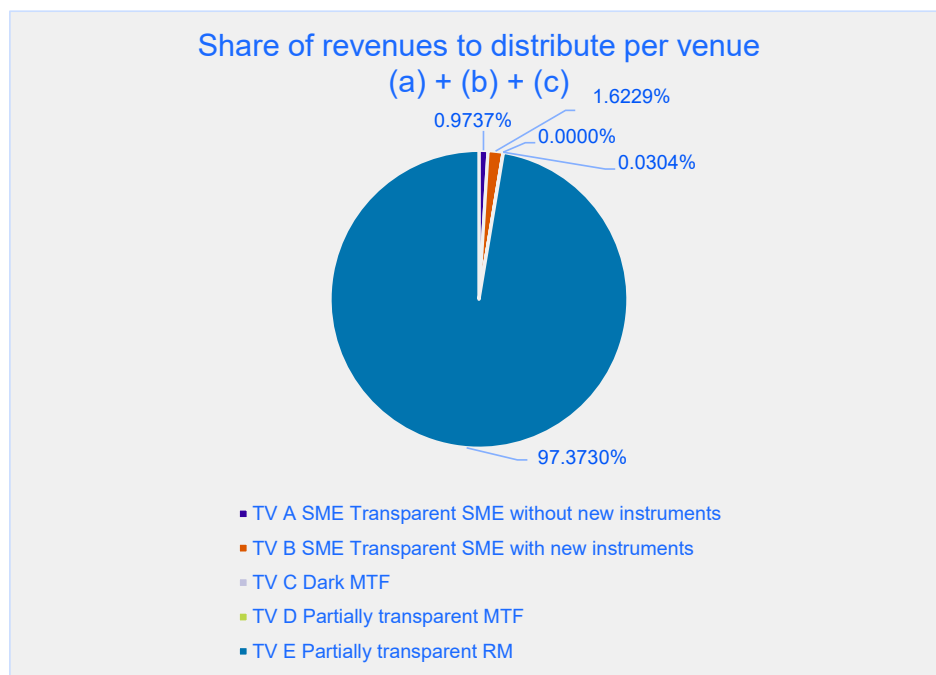


Figure 6: Scenario E



134. On the basis of the simulations, it is evident that trading venue E is the one getting the highest among of revenues due to its trading volume size. However, the analysis should focus on trading venue B, an SME growth market with young instruments and transparent, i.e. a trading venue meeting all three criteria. Such trading venue maximises the amount of revenues redistributed in relative terms under Scenario E. Some considerations are also to be taken into account: (i) considering that the goal of the scheme is to incentivise small trading venues to opt-in, criterion #1 should result having an important weight, (ii) the second criterion can be met only by venues admitting to trading new instruments. Considering that this entails a large investment also criterion #2 should be given the appropriate consideration. Therefore, the difference between the criterion #1 and #2 should be minimised. Furthermore, this criterion uses the total volume for small trading venues but the volume from young instruments for the others. Therefore, due consideration should be given to this criterion to ensure that incumbents might also benefit from it. Finally, the third criterion aims at rewarding those venues which contribute to price formation being pre-trade transparent. In this context, ESMA notes that this scenario is the best in relative terms also for TV E, the non-small trading venue providing a certain level of transparency. Therefore, overall ESMA considers that the set of weights that provides the outcome which appears closest to the intent of co-legislators and therefore, it seems the most appropriate is scenario E.
135. As a result, ESMA's proposal is to set the weights to 4.5, 4.0 and 1.5 for the respective criteria small trading venue, young instruments, and transparent instruments.

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.

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).

4.1.2.2.2 Frequency of the determination of the monetary amount (weights multiplied by trading volumes) and percentages

136. Considering that the weights for small trading venues and for young instruments are to be applied to annual trading volumes determined by the CTP, it is considered that the frequency of the determination of the percentage of revenues to be assigned to each trading venue should be annual.
137. Such frequency would allow to limit to the extent possible the burden of a continuous redetermination of these values. As a result, ESMA proposes that these calculations should occur within one month from the end of each calendar year.

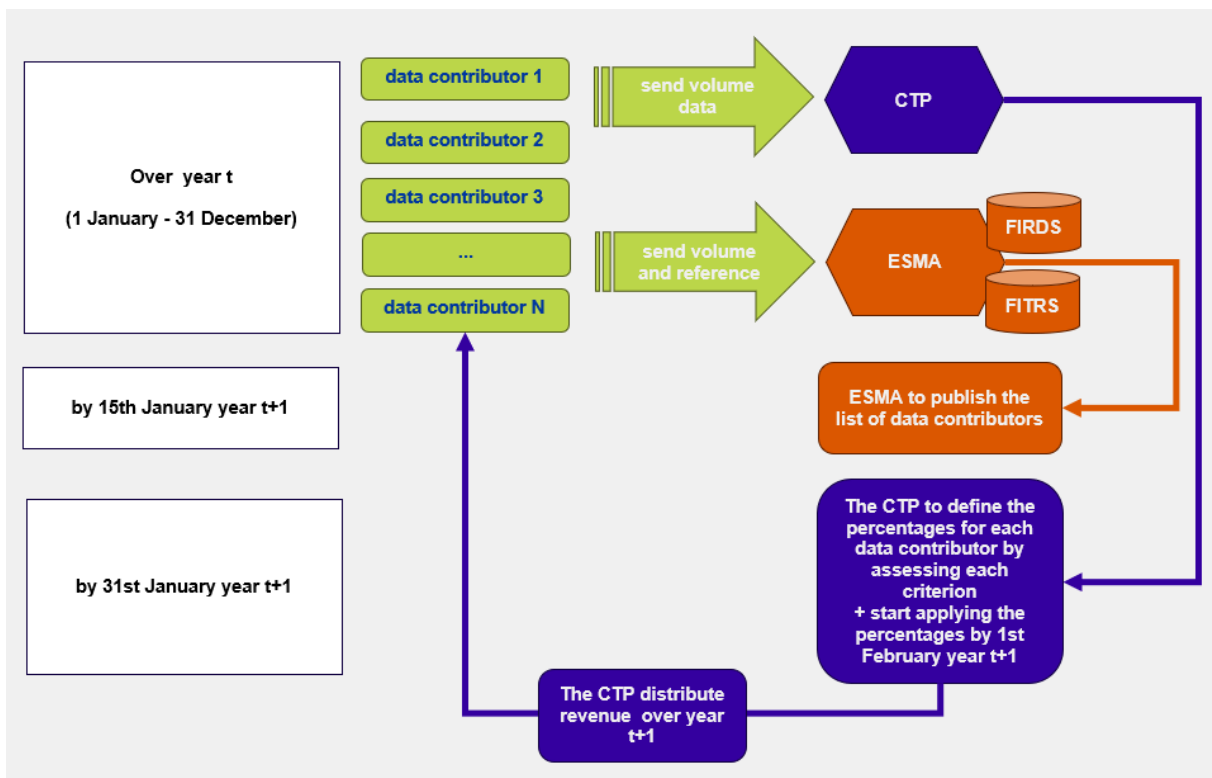
138. In terms of timing of the start of the application of the percentages, since this is linked to the frequency of the revenue distribution which is outside the scope of the mandate of ESMA, it is proposed that they do not apply later than 1st February of each year.

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.

139. The draft RTS with the proposed methodology and weights is in Annex III.

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

Figure 7: Overall process for the revenue distribution



4.2 Mandate under Article 27h(8)(c) of MiFIR

4.2.1 Mandate

140. The mandate under Article 27h(8)(c) of MiFIR can be split in 3 different sections:

- i. to specify the criteria under which the CTP can suspend the revenue distribution scheme, in case it is found that a data contributor has seriously and repeatedly breached data requirements;
- ii. to specify the conditions under which the CTP can resume revenue distribution; and
- iii. where there was no breach of those requirements, to define how to provide the retained revenue plus interest to the relevant data contributor.

Recital (31) *The effectiveness of a consolidated tape depends on the quality of the data transmitted to it by data contributors. In order to ensure a high level of data quality, ESMA should establish the conditions under which the CTP is allowed to temporarily suspend the redistribution of revenue in the event that the CTP proves that a data contributor has seriously and repeatedly breached the data requirements established in this Regulation. Where it is found that that data contributor complied with those data requirements, the data contributor should receive the share of the revenue to which they were entitled plus interest.*

Article 27h - Organisational requirements for CTPs

8. ESMA shall develop draft regulatory technical standards to:

[...]

(c) *specify the criteria under which the CTP can, where the CTP proves that a data contributor has seriously and repeatedly breached the data requirements referred to in Articles 22a, 22b and 22c, temporarily suspend the participation of that data contributor in the revenue redistribution scheme, and specify the conditions under which the CTP is to:*

i) resume revenue redistribution; and

ii) where there was no breach of those requirements, provide that data contributor with the revenue retained, plus interest.

[...]

ESMA shall submit those draft regulatory technical standards to the Commission by 29 December 2024.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in paragraph 1, point (c), in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.’;

141. The following sections provide an analysis of the mandate including the identification of the interplay with other legal acts and documents as well as ESMA’s proposed approach to specify the criteria for the temporary suspension of revenue redistribution, as well as the conditions for its resumption and for the provision of retained revenue.
142. As per above, Article 27h(8)(c) of MiFIR refers to data requirements established under Articles 22a, 22b and 22c of MiFIR.

Article 22a – Transmission of data to the CTP

1. Trading venues and APAs (‘data contributors’) shall, with regard to shares, ETFs and bonds that are traded on a trading venue, and with regard to OTC derivatives as referred to in Article 8a(2), transmit to the data centre of the CTP, as close to real time as technically possible, the regulatory data and the data required pursuant to Article 3(1), without prejudice to Article 4, and pursuant to Article 6(1), Article 10(1) and Articles 20 and 21, and, where regulatory technical standards are adopted pursuant to Article 22b(3), point (d), in accordance with the requirements specified therein. Those data shall be transmitted in a harmonised format, through a high-quality transmission protocol.

[...]

5. Each CTP shall choose, from among the types of transmission protocols that the data contributors offer to other users, which transmission protocol is to be used for the direct transmission of the data referred to in paragraph 1 to the data centre of the CTP. [...]

Article 22b – Data Quality

1. The data transmitted to the CTP pursuant to Article 22a(1) and the data disseminated by the CTP pursuant to Article 27h(1), point (d), shall comply with the regulatory technical standards adopted pursuant to Article 4(6), point (a), Article 7(2), point (a), Article 11(4), point (a), and Article 11a(3), point (a), unless provided otherwise in the regulatory technical standards adopted pursuant to paragraph 3, points (b) and (d), of this Article.

2. The Commission shall establish an expert stakeholder group by 29 June 2024 to provide advice on the quality and the substance of data and the quality of the transmission protocol referred to in Article 22a(1). The expert stakeholder group and ESMA shall work closely together. The expert stakeholder group shall make its advice public.

[...]

3. ESMA shall develop draft regulatory technical standards to specify the quality of the transmission protocol, measures to address erroneous trade reporting and enforcement standards in relation to data quality, including arrangements regarding cooperation between data contributors and the CTP, and, where necessary, the quality and the substance of the data for the operation of the consolidated tapes.

Those draft regulatory technical standards shall in particular specify all of the following:

- (a) the minimum requirements for the quality of the transmission protocols referred to in Article 22a(1); [...]
- (c) what constitutes the transmission of data as close to real time as technically possible;
- (d) where necessary, the data needed to be transmitted to the CTP to be operational, taking into account the advice of the expert stakeholder group established pursuant to paragraph 2, including the substance and the format of those data, in accordance with prevailing industry standards and practices.

For the purposes of the first subparagraph, ESMA shall take into account the advice from the expert stakeholder group established pursuant to paragraph 2 of this Article, international developments, and standards agreed at Union or international level. ESMA shall ensure that the draft regulatory technical standards take into account the transparency requirements laid down in Articles 3, 6, 8, 8a, 8b, 10, 11, 11a, 14, 20, 21 and 27g.

Article 22c – Synchronisation of business clock

1. Trading venues and their members or participants, systematic internalisers, designated publishing entities, APAs and CTPs shall synchronise the business clocks they use to record the date and time of any reportable event.

2. ESMA shall, in accordance with international standards, develop draft regulatory technical standards to specify the level of accuracy to which business clocks are to be synchronised.

[...]

Table 9: Main requirements under Articles 22a, 22b and 22c of MiFIR

Data Requirements		RTS adopted pursuant to
#1	The transmission of data to the data centre of the CTP shall happen as close to real time as technically possible	Article 22a and 22b(3)(c)

#2	Minimum requirement for the quality of the transmission protocol	Article 22b(3)(a)
#3	Quality, format and substance of data for the operation of the consolidated tape, in accordance with prevailing industry standards and practices	Article 22b(3)(d)
#3.1	Equity and Equity-like instruments Pre-trade data - the range of bid and offer prices or designated market-maker quotes, and the depth of trading interest at those prices, to be made public for each class of financial instrument concerned in accordance with Article 3(1), taking into account the necessary calibration for different types of trading systems as referred to in Article 3(2), and the details of pre-trade data;	Article 4(6)(a)
#3.2	Equity and Equity-like instruments Post-trade data - the details of transactions that investment firms, including systematic internalisers and market operators and investment firms operating a trading venue shall make available to the public for each class of financial instrument concerned in accordance with Article 6(1), including identifiers for the different types of transactions published under Article 6(1) and Article 20, distinguishing between those determined by factors linked primarily to the valuation of the financial instruments and those determined by other factors;	Article 7(2)(a)
#4	Business clocks used to record the date and time of any reportable event shall be synchronised to the level of accuracy defined in the RTS	Article 22c

4.2.2 Analysis and proposal

143. As a starting point, ESMA understands that the approach to data quality and the specific features of the revenue redistribution scheme are to be determined by the CTP and that the mandate in Article 27h(8)(c) of MiFIR is then meant to specify general principles for the suspension and the resumption of the revenue redistribution scheme, including the provision of retained revenue.
144. Although the RTS should not curtail the flexibility for the CTP to determine the frequency of data quality checks, it is however necessary to ensure that certain instances are being considered to foster an efficient and fair approach to data quality checks and to revenue redistribution.

4.2.2.1 ESMA's criteria

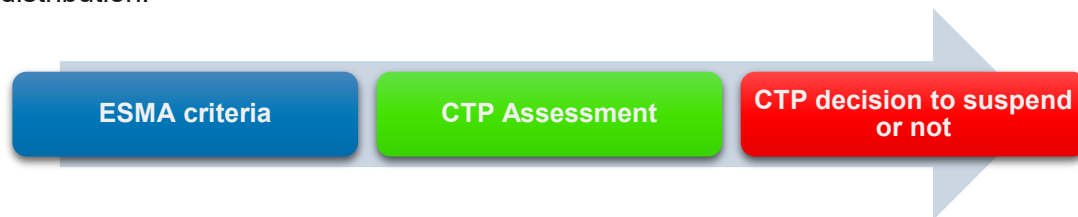
145. The mandate in point (c) of Article 27h(8) of MiFIR requires ESMA to specify, among others the criteria under which the CTP can temporarily suspend the participation of a data contributor in the revenue distribution scheme, in the circumstances where the CTP proves that such data contributor has seriously and repeatedly breached the data requirements referred to in Articles 22a, 22b and 22c of MiFIR.

146. Although MiFIR allows the CTP to exercise a degree of (framed) discretion when deciding to temporarily suspend participation the revenue redistribution, such decision should only be triggered in consideration of well-defined criteria.

The criteria specified by ESMA, under the mandate in point (c) of Article 27h(8) of MiFIR, do not set themselves the circumstances under which the temporary suspension to the participation of a data contributor in the revenue redistribution scheme can be triggered.

The participation to the revenue redistribution can only be suspended by the CTP when there is substantial and repeated evidence of data contributors violating data requirements.

The criteria outlined by ESMA shall serve as triggers for, and be taken into account during, the assessment conducted by the Consolidated Tape Provider (CTP). This assessment may result in a decision to either suspend or not a data contributor's participation in revenue redistribution.



147. In this regard, ESMA suggests two quantitative criteria that should trigger such empowerment when one of the two is met:

#1 Timeliness: when, for three consecutive days, a data contributor has failed to submit transactions or has submitted later than as close to real time as technically possible, as defined in the RTS mandated by Article 22b of MiFIR, more than 3 transactions and those reports account for at least a number of transactions that in percentage is not lower than the 10% of the total number of transaction submitted in a single day.

#2 Quality, format and substance of data: where, for three consecutive days, a data contributor has submitted more than 3 incomplete reports or 3 reports containing potentially erroneous data, and those reports account for at least a number of transactions that in percentage is not lower than the 10% of the total number of transactions submitted in a single day.

148. Notwithstanding the above, whenever the CTP exercises its discretion to suspend the revenue redistribution, ESMA deems appropriate that exceptional circumstances should be properly taken into account when proving that a data contributor has seriously and repeatedly breached the data requirements. Exceptional circumstances are defined as below:

#3 Exceptional circumstances: all conditions that are out of the ordinary, unavoidable or unexpected, and that cause what would have been otherwise identified as a serious and repeated breach of the data requirements referred to in Articles 22a, 22b and 22c of MiFIR by data contributors.

149. As determined by Article 27h(1)(f) of MiFIR, the CTP shall have systems in place to detect data quality issues and request the re-submission of data to data contributors. In this context, as a signal of pre-warning of non-compliance with data quality issues that might result in a suspension of the revenue distribution scheme, the CTP might create automatic real-time alerts which may serve the purpose of identifying and communicating the data quality breaches to the data contributor on a real time and continuous basis.
150. Regardless of the transmission protocol chosen by the CTP to be used by data contributors for the direct transmission to the data centre of the CTP, such protocol should comply with the minimum requirements defined in RTS adopted pursuant to Article 22b(3) of MiFIR, in order to have a successful transmission of data. As well as for the synchronisation of business clocks used to record the date and time of any reportable event: the level of accuracy should comply with the minimum requirements defined in RTS adopted pursuant to Article 22c of MiFIR, in order to have reliable data.
151. Due to potential delays and adverse effects on data quality, format, and substance resulting from lower transmission protocol quality or clock-synchronization accuracy, ESMA suggests establishing additional qualitative criteria for the possible suspension of the revenue redistribution scheme. These criteria are based on whether the specified requirements are met or not, as follows:

#4 Quality of transmission protocol: the data contributor does no longer meet the minimum standards of the transmission protocol as defined in the RTS.

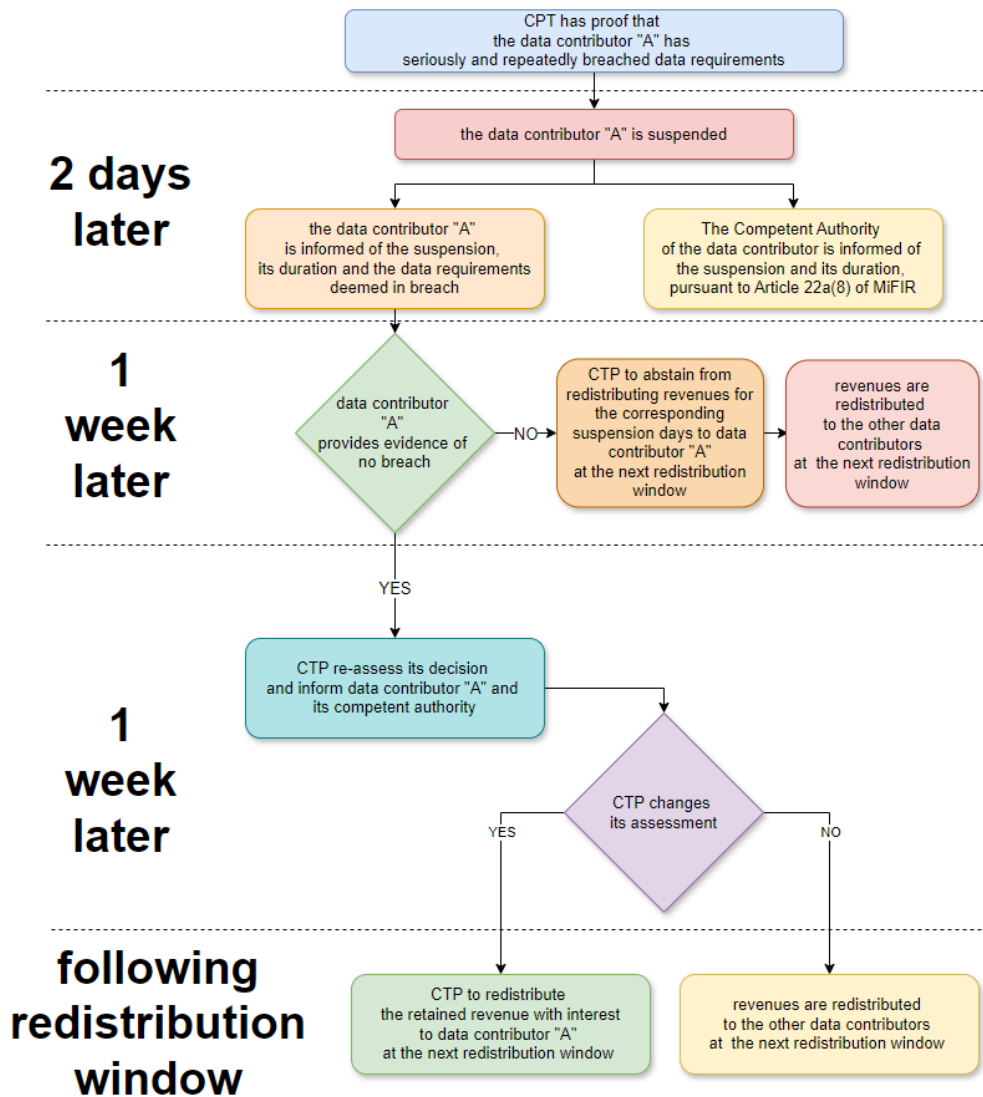
#5 Clock synchronisation: the data contributor does no longer synchronise the business clock in line with the accuracy required by the RTS.

152. While the CTP bears the responsibility of substantiating any data contributor's violation of the data requirements, conversely, the data contributor retains the right to contest the CTP's assessment by presenting supplementary evidence refuting the occurrence of the breach.
153. In view of the above, ESMA would consider it as a good practice that the CTP defines *ex ante*, and communicates to data contributors, all the key elements of the suspension in a fair, transparent and non-discriminatory manner. Such elements should include exceptional circumstances, thresholds triggering the suspension, duration of the suspension, eventual extension of the suspension for additional periods where the grounds for the suspension continue to apply, etc.

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?

4.2.2.2 Procedure for the suspension and the resumption of redistribution

154. While the CTP should remain in charge of the specific arrangements for the suspension and resumption of revenue redistribution, such arrangements should respect minimum requirements to ensure a transparent, non-discriminatory, fair and efficient process. In particular, this process should foster an on-going dialogue between the CTP and each data contributor on the quality of data submitted, with the suspension of redistribution as a measure of last resort in case of serious and repeated breaches of data requirements.
155. It is important to strike a balance between the incentives for data contributors to provide better data quality through frequent suspension and resumption of redistribution offers, and the operational burdens that a high frequency would impose on the CTP.
156. ESMA proposes that minimum requirements for a fair procedure are outlined in the RTS, with specific timeframes for each step to be further specified. The CTPs' arrangements for the suspension and resumption of redistribution shall follow specific steps, as per the below flowchart.



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?

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?

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?

4.2.2.2.1 Notification of suspension

157. In accordance with Article 22a(8) of MiFIR, the CTP is required to promptly notify the competent authority when it identifies data quality insufficiencies from a data contributor. It is important to note that a breach of the requirements outlined in Article 22a of MiFIR may trigger suspension.
158. Therefore, considering the aforementioned circumstances, ESMA is of the view that the obligation to notify the competent authority of a data contributor about a triggered suspension is already encompassed within the provisions of Article 22a of MiFIR and therefore it is not needed to specify this in the draft RTS.

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?

4.2.2.2.2 Approach to retained revenue and interest applied

159. The CTP should retain the revenue to be redistributed during at least one revenue redistribution window when it has decided to suspend the redistribution for the corresponding suspension days. When the CTP considers that the data contributor was not in breach of the data requirements, based on the evidence provided by the data contributor, it should release the relevant portion of retained revenue with interest at the next redistribution window.
160. Retained revenue for each data contributor should be earmarked to allow for its redistribution to the data contributor, with the interest compounded on the basis of the average ECB marginal lending facility rate registered over the period of the suspension of the revenue distribution scheme.
161. When the CTP confirms that the data contributor has committed repeated and serious breaches, after the data contributor has been given the possibility to provide additional evidence, the CTP should retain the revenue for the corresponding suspension days. Such retained revenue should be redistributed to the other data contributors at a forthcoming redistribution window.

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?

5 RTS on the synchronisation of business clocks

162. This section concerns the new mandate under Article 22c(2) of MiFIR, on the synchronisation of business clocks.

5.1 Mandate

Article 22c - Synchronisation of business clocks

1. Trading venues and their members, participants or users, systematic internalisers, designated publishing entities, APAs and CTPs shall synchronise the business clocks they use to record the date and time of any reportable event.

2. ESMA shall, in accordance with international standards, develop draft regulatory technical standards to specify the level of accuracy to which business clocks are to be synchronised.

ESMA shall submit those draft regulatory technical standards to the Commission by 29 December 2024.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

163. The new Article 22c of MiFIR constitutes a transposition to MiFIR of the clock synchronisation requirement applying to trading venues and their members or participants, that was set under the now deleted Article 50 of MiFID II. Article 22c of MiFIR, however, expands the scope of the clock synchronisation requirement to include SIs, DPEs, APAs and CTPs, in addition to TV operators and their members or participants.

164. The extension of the clock synchronisation requirement to these entities is geared towards ensuring that, in the context of consolidation of data by the CTP, timestamps reported by different entities can be compared meaningfully¹⁵.

165. As concerns the legal mandate itself, Article 22c(2) mirrors the one in Article 50(2) of MiFID II: ESMA shall specify the level of accuracy to which business clocks are to be synchronised, in accordance with international standards.

¹⁵ Regulation (EU) 2024/791, Recital 20.

166. Article 1, paragraph 9, of Directive (EU) 2024/790¹⁶ deletes Article 50 of MiFID II, thus depriving Commission Delegated Regulation (EU) 2017/574¹⁷ (s.c. RTS 25) of its legal basis. This renders RTS 25 obsolete, and it therefore appears adequate to repeal RTS 25 as of the date of entry into force of the new RTS on clock synchronisation.
167. However, ESMA considers that most of the substantial provisions of RTS 25 are compatible with the new legal mandate under Article 22(c) of MiFIR and can be transposed to the new RTS on clock synchronisation, as further detailed in the next section.

5.2 Analysis and proposal

168. As mentioned above the key elements of Article 50 of MiFID II have been replicated in Article 22c of MiFIR. ESMA therefore considers that the general approach supporting RTS 25 appears still valid and can be reflected in the RTS on new clock synchronisation. Such approach can be summarised as follows:
- a. Use UTC as the reference time to which subject entities shall synchronise their business clocks;
 - b. Allow synchronisation to UTC both via a timing centre and through a satellite system;
 - c. Differentiate the required level of accuracy based on the type of entity (e.g. TV operators vs TV members or participants) and;
 - d. Further graduate accuracy for TV members depending on the type of activity they perform.
169. In the spirit of leveraging on the already existing provisions of RTS 25, ESMA proposes to:
- a. Reflect in the new RTS on clock synchronisation the provisions set in Article 1 of RTS 25, with some minor modifications required to extend its scope to the new entities, and update the reference to the publications of the Bureau International des Poids et Mesures (BIPM);

¹⁶ Directive (EU) 2024/790 of the European Parliament and of the Council of 28 February 2024 amending Directive 2014/65/EU on markets in financial instruments (OJ L, 2024/790, 8.3.2024).

¹⁷ Commission Delegated Regulation (EU) 2017/574 of 7 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the level of accuracy of business clocks.

- b. Reflect in the new RTS on clock synchronisation the provisions set in Article 2 of RTS 25 as currently drafted for trading venue operators;
 - c. Reflect in the new RTS on clock synchronisation the provisions set in Article 3 of RTS 25 for trading venue “members or participants”, and add a reference to “users” to align to the wording of Article 22c of MiFIR;
 - d. Reflect in the new RTS on clock synchronisation the provisions set in the obligation to ensure traceability to UTC currently set in Article 4 of RTS 25;
 - e. Specify in bespoke new articles and correspondent tables in the annex the maximum divergence and timestamp granularity required for SIs, DPEs, APAs and CTPs;
170. The following sections detail how ESMA intends to implement the abovementioned actions in the text of the new RTS issued on the basis of Article 22c of MiFIR.

5.2.1 Reference time

171. Coordinated universal time (UTC) has been recommended as the unique time scale for international reference and the basis of civil time by the general conference on weights and measures (CGPM) already in 1975, and this has been confirmed in 2018¹⁸.
172. ESMA, considering that UTC is currently indicated as reference time in RTS 25, and in light of the need to develop this mandate in accordance with international standards, sees no merit in prescribing the use of another reference time to which entities in scope shall synchronise their business clocks.
173. As it concerns how synchronisation to an external time source should be achieved, ESMA understands that the use of time disseminated directly by timing centres or via a global navigation satellite system are still the most reliable and widespread methods. In the interest of technological neutrality, ESMA neither intends to specify the requirement further, nor to define how entities in scope shall disseminate time internally (i.e. between the “master” clock synchronised to the external data source and the other internal “slave” clocks).

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

¹⁸ <https://www.bipm.org/en/cgpm-2022/resolution-4>

5.2.2 Level of accuracy for operators of trading venues

174. Under current rules, the maximum allowed divergence from UTC and the timestamp granularity applicable to operators of trading venues is dependent on the gateway to gateway latency of the system they operate, i.e. the “the time measured from the moment a message is received by an outer gateway of the trading venue's system, sent through the order submission protocol, processed by the matching engine, and then sent back until an acknowledgement is sent from the gateway”, such that the smaller the latency, the smaller the maximum allowed divergence from UTC. Specifically, for a latency longer than 1 millisecond, the maximum divergence shall not exceed 1 millisecond, and for latencies shorter than that, the maximum allowed divergence shall not exceed 100 microseconds. The same principle applies to timestamp granularity, that should be of 1 millisecond or better in the former case, and 1 microsecond or better in the latter.
175. Such approach was adopted in light of the fact that trading venues operating electronic systems receive and acknowledge a considerable number of orders every second¹⁹, and that a level of precision lower than that would have not allowed NCAs to properly monitor the sequencing of orders and executed transactions.
176. Having assessed the requirements for operators of trading venues as they are currently set out in RTS 25, ESMA understands that since the enactment of RTS 25 the speed of high frequency trading has since increased, up to a level where major TVs timestamp messages to a precision of 100 nanoseconds²⁰. This additional level of granularity would match the ever-narrowing margin between orders from HFT competing to react to the same changes in price, that the TV receives in the timespan of microseconds²¹. For this reason, ESMA proposes to increase timestamp granularity for operators of TVs with a gateway-to-gateway latency below 1 millisecond to 0.1 microseconds. The other requirements applicable to operators of TVs, including the maximum allowed divergences from UTC and the derogation set out in Article 2(2) of RTS 25 for voice trading systems, appear still valid, and ESMA proposes to transpose them as currently drafted to the new RTS on clock synchronisation.

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.

¹⁹ Recital 2, Commission Delegated Regulation (EU) 2017/574.

²⁰ Section BIS Working Papers No 955 “Quantifying the high-frequency trading “arms race”” by Matteo Aquilina, Eric Budish and Peter O’Neill, available at <https://www.bis.org/publ/work955.pdf>, section 2.2.

²¹ See the BIS Working Paper quoted above, in Footnote 20, section 7, indicating that the mode duration of “races”, i.e. the timestamp difference between the successful order and the subsequent ones, is 5 to 10 microseconds.

5.2.3 Level of accuracy for members, participants or users of a trading venue

177. With respect to the appropriate level of accuracy for members, participants or users of a trading venue, ESMA finds that in principle the current rules, which calibrate maximum divergence from UTC and timestamp granularity to the inherent time sensitiveness of type of trading activity, should continue to apply in their current form.
178. However, as it concerns participants using high frequency trading (HFT) techniques, the thresholds applicable to them should remain aligned to those set for operators of trading venues with short gateway-to-gateway latency. Consequently, should ESMA finally consider implementing the proposal on increasing timestamp granularity set in section 5.2.2, the same should apply to participants engaging in HFT.
179. The provision in Article 22c(1) of MiFIR refers to “users” of a trading venue, which is a term that is not defined in MiFID II nor in MiFIR. ESMA understands that this wording was introduced in Article 22c and in other provisions of the MiFIR review following a recommendation from ESMA to this effect²², intended at capturing in scope those trading on an OTF, that MiFID II and MiFIR refer to as “users”, “active members” or “clients”. As OTF users already fall within the scope of application of RTS 25, the addition of this term in the new RTS on clock synchronisation should not involve a substantive change for them.
180. ESMA has also assessed the interplay between Article 22c and Article 4 of Regulation (EU) 2022/858²³ (hereinafter “DLT Pilot Regulation”). Article 4 of the DLT Pilot Regulation allows market operators and investment firms operating a DLT MTF²⁴ or a DLT TSS²⁵ to be granted an exemption from their NCA from certain provisions of MiFID II and MiFIR, among those Article 53 of MiFID II. If the DLT MTF obtains such exemption, it can admit natural persons to deal on own account as direct members or participants. Since, by virtue of Article 4(1) of DLT Pilot Regulation, all MiFIR and MiFID II provisions for which no exemption is expressly provided for apply to DLT MTFs, it follows that natural persons admitted as members or participants to a DLT MTF are subject to Article 22c.

²² Section 4.2.2. of ESMA74-362-1013 “Final report on MiFIR Review” available at: https://www.esma.europa.eu/sites/default/files/library/esma74-362-1013_final_report_mifir_review_-_data_reporting.pdf

²³ Regulation (EU) 2022/858 of the European Parliament and of the Council of 30 May 2022 on a pilot regime for market infrastructures based on distributed ledger technology and amending Regulations (EU) No 600/2014 and (EU) No 909/2014 and Directive 2014/65/EU (OJ L 151, 2.6.2022, p. 1–33).

²⁴ i.e. an MTF that only admits to trading DLT financial instruments.

²⁵ i.e. a market infrastructure that combines the operations of an MTF and of a CSD, for trading and settlement of DLT financial instruments.

181. ESMA, taking into account the assessment made in its DLT Report²⁶, considers that such interplay should not lead to the definition of levels of accuracy tailored to natural persons that are members of a DLT MTF. This is because Article 4(2)(d) of the DLT Pilot Regulation prohibits natural persons to use HFT techniques, thus subjecting them to less stringent levels of accuracy, that should not determine a significant compliance burden.

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

5.2.4 Traceability to UTC

182. Article 4 of RTS 25 requires operators of trading venues and their members or participants to establish a system of traceability to UTC, and to review the compliance of their traceability system at least once a year.

183. ESMA is aware that the application of this Article raised interpretative doubts in the past, especially as it concerns the application of the concept of traceability to clocks synchronised via GNSS.

184. This specific aspect, together with some others, was clarified in section 7 of the “Guidelines on transaction reporting, order record keeping and clock synchronisation”²⁷. Following the issuance of such guidance, ESMA was not made aware, neither by market participants nor national competent authorities of major implementation issues related to this requirement. ESMA is also aware of ongoing discussions within the metrological community on defining a commonly agreed methodology for traceability of GNSS time to UTC²⁸, which should further remove potentially remaining doubts on how this should be achieved.

185. In light of the above, ESMA proposes to reflect this requirement as currently drafted in RTS 25 and extend its scope to all entities in scope of Article 22c of MiFIR.

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

²⁶ Section 5.2.5. of the Final Report on the Call for Evidence on DLT Pilot Regime https://www.esma.europa.eu/sites/default/files/library/esma70-460-111_report_on_the_dlt_pilot_regime.pdf

²⁷ ESMA/2016/1452 “Guidelines on transaction reporting, order record keeping and clock synchronisation”, https://www.esma.europa.eu/sites/default/files/library/2016-1452_guidelines_mifid_ii_transaction_reporting.pdf

²⁸ See P Defraigne et al, “Achieving traceability to UTC through GNSS measurements”, 2022 Metrologia 59 064001, available at: <https://iopscience.iop.org/article/10.1088/1681-7575/ac98cb>

5.2.5 Application of clock synchronisation requirements to new entities

186. As mentioned, the main novelty of Article 22c of MiFIR is that it extends clock synchronisation requirements to SIs, DPEs, APAs and CTPs, to ensure meaningful comparison of timestamps in the context of consolidation of data by the CTP²⁹.
187. In light of the above, the question as to what accuracy levels should be set for these entities should be answered in relation to the role of these entities in the data transmission chain to the CTP. To this end, it should be recalled that TVs and APAs are the only entities that are mandated to contribute data directly to the CTP³⁰, while SIs and DPEs do so only indirectly, by transmitting data to an APA.
188. Such difference suggests aligning the accuracy requirements for the APA to those applicable to operators of trading venues, so to keep them consistent for both data contributors. In the same spirit, there should be no difference in the requirements applicable to SIs and DPEs.
189. As it concerns APAs, ESMA notices that these entities are already subject to timestamp accuracy and granularity requirements pursuant to the current text of Article 18 of RTS 13³¹. The most stringent levels set in that provision - one millisecond of maximum divergence from UTC, timestamp granularity of one millisecond or better – is aligned to the least stringent accuracy level applicable to trading venue operators. ESMA thus proposes to maintain this level of accuracy for APAs, but to make it applicable to all transactions published by the APA. Since RTS 13 is undergoing a revision as well, and the legal basis for the specification of clock synchronisation requirements for APAs has now shifted to Article 22c of MiFIR, it appears adequate to transpose the relevant provisions of Article 18 of RTS 13 in this RTS.
190. With regard to SIs and DPEs, ESMA notices that both types of entities are no other than investment firms engaging in trading activity, just like members, participants or users of trading venues. It thus appears appropriate – and consistent with the principle that same rules should apply to the same activities – that SIs and DPEs comply with accuracy levels analogous to those set for trading venues' members, participants and users. However, a direct application of those requirements, that are based on the type of trading activity, is not possible because the current definition of what constitutes high-frequency trading does not apply to OTC transactions.

²⁹ Regulation (EU) 2024/791, Recital 20.

³⁰ They are s.c. "data contributors" within the meaning of Article 22a(1) of MiFIR review.

³¹ Commission Delegated Regulation 2017/571 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers.

191. Consequently, ESMA proposes to define the accuracy levels for SIs according to the same gateway to gateway latency criterion applicable to operators of trading venues. This is because SIs tend to operate request for quotes systems comparable, in terms of latency and complexity, to those of trading venues. Finally, it should be noticed that pursuant to Article 14 of MiFIR, SIs are subject to the obligation to make public firm quotes for the instruments for which they are systematic internalisers. ESMA considers that the proposed accuracy levels for SIs are adequate for discharging also this obligation, but stakeholders' feedback is welcome on the matter.
192. As it concerns entities that are DPEs without also having the status of SI, neither the criterion based on type of trading activity nor that based on gateway-to-gateway latency appear applicable, since the systems operated by such entities are likely to be less complex. ESMA thus proposes to subject DPEs to an accuracy requirement of one millisecond for both timestamp granularity and maximum divergence from UTC, regardless of the type of trading activity they perform.
193. Finally, as it concerns CTPs, their expected accuracy levels should be calibrated in view of the events that CTPs shall timestamp, and of the delay within which such events occur. The CTP shall timestamp the receipt of the input data submitted by data contributors, so to monitor that data contributors perform timely submission, and it shall then timestamp the dissemination of the consolidated tape, as this is part of the core market data. As both events – submission and dissemination – shall occur in the order of magnitude of milliseconds, ESMA proposes that the accuracy level for CTPs should be one millisecond, both in terms of maximum divergence from UTC and of timestamp granularity.

Summary of proposed accuracy levels:

	Maximum divergence from UTC	Granularity of timestamp
APA and CTP	1 millisecond or better	1 millisecond or better
SI with gateway-to-gateway latency less than one millisecond	100 microseconds	1 microsecond or better
DPE and SI with gateway-to-gateway latency higher than one millisecond	1 millisecond or better	1 millisecond or better

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

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.

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

6.1 Mandate

Article 27d of MiFIR

4. *ESMA shall develop draft regulatory technical standards to determine:*

- (a) the information to be provided under paragraph 1, including the programme of operations;
- (b) the information to be included in the notifications referred to in Article 27f(2) as regards APAs and ARMs.

Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

5. *ESMA shall develop draft implementing technical standards to determine standard forms, templates and procedures for the information to be provided pursuant to paragraph 1 of this Article and the information to be included in the notifications referred to in Article 27f(2) as regards APAs and ARMs.*

Power is conferred on the Commission to adopt the implementing technical standards referred to in the first subparagraph in accordance with Article 15 of Regulation (EU) No 1095/2010.

Article 27db of MiFIR

7. *ESMA shall develop draft regulatory technical standards to determine:*

- (a) the information to be provided pursuant to paragraph 1;
- (b) the information to be included in the notifications referred to in Article 27f(2) as regards CTPs.

ESMA shall submit those draft regulatory technical standards to the Commission by 29 December 2024. Power is delegated to the Commission to supplement this Regulation by adopting the regulatory technical standards referred to in the first subparagraph in accordance with Articles 10 to 14 of Regulation (EU) No 1095/2010.

8. *ESMA shall develop draft implementing technical standards to determine standard forms, templates and procedures for the information to be provided pursuant to paragraph 1 of this Article and the information to be included in the notifications referred to Article 27f(2) as regards CTPs. ESMA shall submit those draft implementing technical standards to the Commission by 29 December 2024.*

Power is conferred on the Commission to adopt the implementing technical standards referred to in the first subparagraph in accordance with Article 15 of Regulation (EU) No 1095/2010.

6.1.1 Current regulatory framework

194. Before the MiFIR review, amongst others Title IVa of MiFIR regulated the following areas:
- Article 27b: Requirements for authorisation;
 - Article 27c: Authorisation of data reporting services providers;
 - Article 27d: Procedures for granting and refusing applications for authorisation;
 - Article 27e: Withdrawal of authorisation;
 - Article 27f: Requirements for the management body of DRSPs;
 - Article 27g: Organisational requirements for APAs;
 - Article 27h: Organisational requirements for CTPs;
 - Article 27i: Organisational requirements for ARMs.
195. The above articles provided the legal basis to develop RTS 13, which sets out requirements for data reporting services providers on (i) Authorisation; (ii) Organisational requirements; and (iii) Publication arrangements.
196. In the old MiFIR the authorisation requirements applied to all types of DRSPs (i.e. APAs, ARMs, CTPs). Furthermore, the old MiFIR provided some exceptions applicable to CTPs in the area of post-trade transparency under Articles 6 and 10 for shares, depositary receipts, ETFs, certificates and under Article 20 and 21 for bonds, structured finance products, emission allowances and derivatives. This difference was also reflected under Articles 15 and 15a for in RTS 13, covering respectively the scope of instruments to be published.
197. The old MiFIR also mandated ESMA to develop a single ITS on the authorisation of all DRSPs. This ITS currently provides the template for entities that apply for an authorisation to operate any type of DRSP.

6.1.2 Changes to the regulatory framework

198. The MiFIR review introduced a clear distinction between the regime governing APAs/ARMs on the one hand and CTPs on the other hand.
199. The MiFIR review amended Article 27d of MiFIR concerning authorisation to exclusively cover APAs and ARMs. While Article 27d of MiFIR retains the provision for developing

RTS for APAs and ARMs, Article 27db(7) establishes a new mandate for ESMA to draft a standalone RTS for CTP authorisation. In terms of ITSs, the MiFIR review introduced two new articles mandating ESMA to draft authorisation ITS: Article 27d(3) for APAs and ARMs, and Article 27db(8) for CTPs.

200. Regarding organisational and publication arrangements, the mandates for APAs and ARMs remain unchanged.
201. For CTPs, the MiFIR review specifies in Article 27db(5) that the CTP shall comply at all times with the organisational requirements set out in Article 27h. In addition to MiFIR, authorised DRSPs are required to comply with the requirements under DORA³² starting from 2025.
202. Due to these significant changes in the regulatory landscape governing data reporting services, a review of RTS 13 is warranted. This review aims to ensure alignment with the revised MiFIR framework, to address any discrepancies or gaps arising from the introduction of distinct regimes for APAs/ARMs and CTPs as well as to reflect the requirements introduced by DORA.

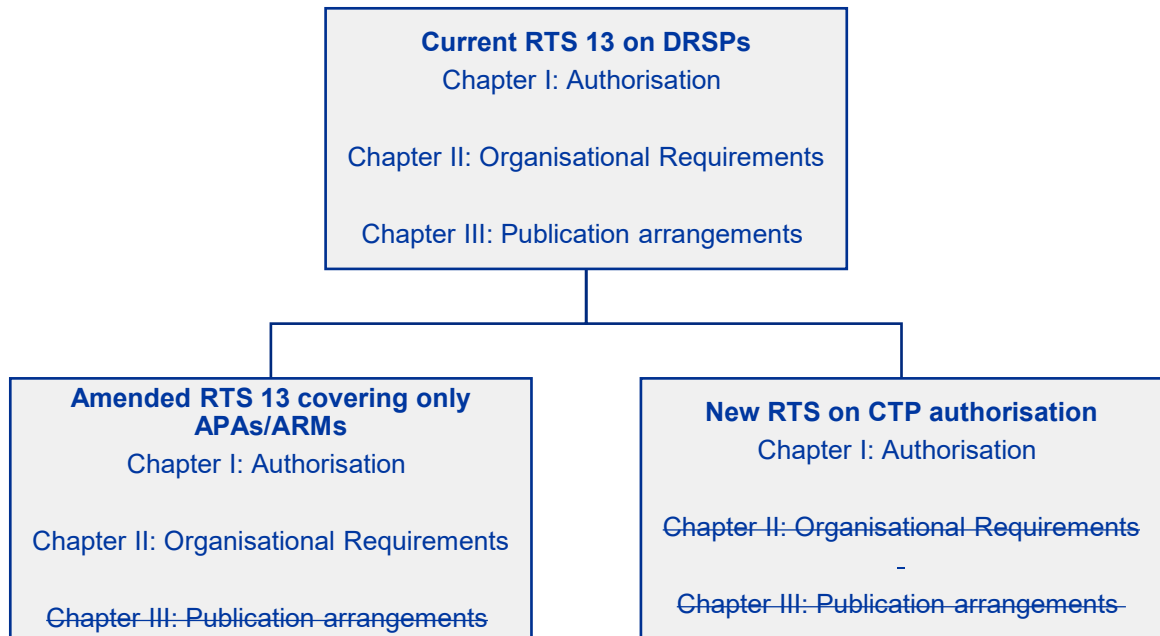
6.2 Analysis and proposal

203. This section provides ESMA's proposals for:
 - Amending the current RTS 13 through a recast covering only APAs and ARMs and the related ITS;
 - The new RTS on CTP authorisation and the related ITS.

The approach is summarised in the figure below.

³² [Regulation \(EU\) 2022/2554](#).

Figure 8: General approach to RTS 13 review



6.2.1 Authorisation, organisational requirements and publication arrangements of APAs and ARMs (RTS 13)

6.2.1.1 Authorisation

204. Following on from the above, all references to CTPs including specific articles pertaining to them have been removed in the draft RTS.
205. Moreover, ESMA proposes introducing new provisions concerning the ownership and internal controls of APAs and ARMs based on its supervisory experience over the last years with other mandates.
206. In particular, ESMA proposes to introduce new provisions aiming at (i) identifying entities exerting significant control over the applicant and (ii) assessing the APAs' and ARMs' internal control environment at the gate.
207. It should be noted that Article 5 of the draft RTS, which pertains to the information on the members of the management body required for obtaining authorisation, may need to be amended at a later stage to cross-refer to the RTS on the assessment of the

suitability of the members of the management body of DRSPs³³. Such change might be necessary to ensure consistency between the two RTSs regarding the information provided by the members of the management body of APAs and ARMs.

208. Another modification concerning the authorisation requirements pertains to DORA, which supersedes all sectoral legislation, including MiFIR, in the domain of digital operational resilience. Consequently, APAs and ARMs must provide evidence during the authorisation process on their ability to comply with DORA and its associated technical standards effective from 2025. Accordingly, ESMA proposes the removal of the following articles in the organisational requirements chapter of RTS 13, as they will be replaced by provisions delineated within DORA:
- Article 7: Business continuity and back-up facilities;
 - Article 8: Testing and capacity;
 - Article 9: Security.
209. To ensure that APAs and ARMs comply with digital resilience requirements at the time of application, Article 7 in the RTS will provide a cross-reference to the main obligations under DORA. Article 7 will also define the list of policies and procedures expected by APAs and ARMs to comply with DORA.
210. Lastly, the MiFIR review mandated ESMA to develop a new ITS specifically for the application for authorisation of APAs and ARMs. Consequently, ESMA is also proposing a new draft ITS reflecting its proposed RTS for APAs and ARMs. The draft ITS sets out the template for applicants to provide the information requested in the draft authorisation RTS for APAs and ARMs.

6.2.1.2 Organisational requirements

211. Consistent with the authorisation part, references and requirements specific to CTPs have been removed. Specifically, within this context, Article 10 of RTS 13 concerning the management of incomplete or potentially erroneous information will solely pertain to APAs.
212. Article 9 on the organisational requirements regarding outsourcing will only be amended to carve out references to ICT third-party providers. APAs and ARMs shall comply with the outsourcing requirements under Chapter V in DORA. The remaining outsourcing requirements that are not covered under DORA will remain applicable.

³³ ESMA submitted to the European Commission (EC) in accordance with the mandate in Article 27f(5) of MiFIR the [Final Report](#) on the draft Regulatory Technical Standards on the management body of DRSPs on 25 October 2022.

213. The remaining articles are unchanged in the draft RTS.

6.2.1.3 Publication arrangements

214. ESMA proposes to delete the provisions that are no longer relevant and to move others to more relevant technical standards covering data reporting and distribution. In particular:

- Article 15 and 15a of RTS 13, covering the scope of the CTP for financial instruments, should be deleted from the text of RTS 13 as no longer compatible with the new approach on CTP introduced by MiFIR review;
- Articles 16 and 17 of RTS 13, covering the reporting by DRSPs of duplicative trades, should be removed from the text of RTS 13 as they are no longer relevant because MiFIR review now requires publishing one transaction to a single APA and such change will be reflected in the RTS 1 review;
- Article 18(1), covering the details to be published by APAs, should be relocated to RTS 1 and 2 review, respectively for equity and non-equity instruments, to consolidate provisions related to post-trade transparency;
- Article 18(2) to (5) should be removed as it will be covered by the recast [RTS on clock synchronization];
- Article 19 of RTS 13, which requires that market data should be distributed through all channels without discrimination, should be relocated to the draft RTS on reasonable commercial basis for market data, which ESMA is empowered to draft according to Article 13(5) of the revised MiFIR. This move is intended to consolidate provisions related to the production and dissemination of market data, ensuring that all pertinent articles are situated together. By integrating Article 19 of RTS 13 into the section on “non-discriminatory access” of the draft RTS on reasonable commercial basis, the organization of the regulatory framework will be improved, providing clearer guidance and facilitating easier reference for stakeholders.
- Article 20 of RTS 13 should be removed as it will be covered in the upcoming RTS on input/output data for the CTP.

215. Considering the above, ESMA proposes including the current Article 14 on machine readability under organisational requirements and removing entirely Chapter III on publication arrangements from the RTS.

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

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

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

6.2.2 Authorisation of CTPs

216. The MiFIR review introduced a new mandate under Article 27db(7) and (8) for ESMA to draft both an RTS and an ITS concerning the authorisation process for CTPs.
217. Unlike APAs and ARMs, ESMA is the sole competent authority for CTPs. Following the selection procedure, the selected CTPs should apply for the authorisation by sending their application to ESMA.
218. In drafting this RTS, ESMA considered the two legal mandates under Article 27db(7) and (8) of MiFIR stating that:
- a. the applicant shall provide all the information necessary to enable ESMA to confirm it has put in place all the necessary arrangements to fulfil the selection criteria;
 - b. the applicant shall provide the names of all members of its management body and notify any change to its membership.
219. Following the selection phase, the selected CTP (per asset class) shall demonstrate to ESMA the implementation of its proposed plan and to have put in place the necessary arrangements to fulfil those criteria (i.e. CTP demonstrating that the criteria is met). This approach should ensure the continuity from the selection process, the authorisation and the ongoing supervision of the CTPs.
220. The RTS on CTP authorisation would be the legal tool for ESMA to ensure that those criteria are always met by the applicant at the time of application and after the authorisation, as per Article 27db(1).
221. ESMA also considered the legal requirements on CTPs to comply at all times with the condition of the authorisation under Article 27db(5) of MiFIR.
222. ESMA proposes to introduce for the authorisation of CTPs similar requirements to those under RTS 13 in the areas of (i) organisation, (ii) ownership, (iii) governance, (iv) management body and (v) internal controls.
223. ESMA proposes to insert provisions related to business operativity. Under this provision, the selected CTP shall provide to ESMA information on the total expenditure to run the consolidated tape. The RTS will also provide a cross-reference to other technical standards that the applicant should comply on, namely on market data fees

and licensing models. In this way ESMA will have visibility on the envisaged revenues and costs of the CTP.

224. Concerning digital operational resilience requirements, ESMA proposes mirroring the approach taken in RTS 13 for APAs and ARMs. As CTPs are subject to DORA, a selected applicant seeking authorisation to operate a CTP should provide all the necessary documents to demonstrate its ability to comply with DORA for authorisation purposes.
225. The proposed authorisation RTS also includes several requirements regarding the applicant's arrangements for ingesting and consolidating data as defined in other technical standards, namely the RTS on input and output data of CTPs and RTS on reasonable commercial basis. ESMA also expects applicants to provide evidence on their arrangements regarding the record keeping arrangements. ESMA also considers the ability to disseminate machine-readable data as a requisite for operating a CTP and therefore proposes checking this aspect for authorisation purposes in line with the approach outlined for APAs and ARMs.
226. Finally, as per the selection criteria set in Article 27da(2)(m) of MiFIR on energy efficiency, ESMA proposes that the applicant CTP provide the Power Utilisation Effectiveness (PUE) as defined in the European Code of Conduct on Data Centre Energy Efficiency. The data shall be in line with the technical screening criteria for activity 8.1 'Data processing, hosting and related activities' as defined in the Taxonomy Regulation Climate Delegated Regulation.
227. The above authorisation requirements are reflected in the template provided in the accompanying draft ITS mandated under Article 27db(8) of the revised MiFIR.

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

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

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

Q49: Do you have any further comments or suggestions on the draft RTS? Please elaborate your answer.

7 Criteria to assess CTP applicants

7.1 Mandate

228. Summary of the relevant articles and recitals:

Recitals (25) and (26) of [MiFIR amending] Regulation (EU) 2024/791³⁴

(25) Competition among CTPs ensures that the consolidated tape is provided in the most efficient way and under the best conditions for users. However, to date, no entity has applied to act as a CTP. It is therefore appropriate to empower ESMA to periodically organise a competitive selection procedure to select a single entity which is able to provide the consolidated tape for each specified asset class for a limited period of time. First, ESMA should initiate the selection procedure concerning the consolidated tape for bonds. Within six months of the initiation of that selection procedure, ESMA should initiate the selection procedure for a CTP for shares and ETFs. Last, ESMA should initiate the selection procedure for the CTP on OTC derivatives within three months of the date of application of the delegated act specifying the appropriate OTC derivatives identifier for transparency purposes and no earlier than six months from the initiation of the selection procedure for a CTP for shares and ETFs.

(26) The purpose of the selection procedure is to award the right to operate a consolidated tape for a period of five years. The selection procedure is subject to the rules laid down in Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council³⁵. ESMA should, for all classes, select a candidate on the basis of its technical abilities to operate a consolidated tape, including its ability to ensure business continuity and resilience, as well as its ability to use modern interface technologies, the organisation of its management and decision-making processes, its methods for ensuring data quality, the costs required for developing and operating a consolidated tape, the simplicity of the licences that users have to enter into in order to receive the core market data and regulatory data, including the number of types of licensing for various use cases or users, the level of fees charged to users and its processes for mitigating energy consumption. Specifically for the CTP for bonds, when selecting a CTP, ESMA should take into account the existence of fair and equitable arrangements for revenue redistribution. It is appropriate for such arrangements to acknowledge the role that small trading venues play in providing undertakings with the opportunity to issue debt to finance their activities. For shares and ETFs, CTPs should display

³⁴ Regulation (EU) 2024/791 of the European Parliament and of the Council of 28 February 2024 amending Regulation (EU) No 600/2014 as regards enhancing data transparency, removing obstacles to the emergence of consolidated tapes, optimising the trading obligations and prohibiting receiving payment for order flow, OJ L, 2024/791, 08.03.2024.

³⁵ Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012 ([OJ L 193, 30.7.2018, p. 1](#)).

the European best bid and offer, with no dissemination of the market identifier code of the venue. By 30 June 2026, the Commission should make an assessment of that level of pre-trade information for the functioning and competitiveness of Union markets and should, where appropriate, accompany that assessment with a legislative proposal on the design of the consolidated tape.

Article 27da of MiFIR

1. For each of the following asset classes, ESMA shall organise a separate selection procedure for the appointment of a single CTP for a period of five years:

- (a) bonds;
- (b) shares and ETFs; and
- (c) OTC derivatives or relevant subclasses of OTC derivative.

ESMA shall initiate the first selection procedure pursuant to the first subparagraph, point (a), by 29 December 2024.

ESMA shall initiate the first selection procedure pursuant to the first subparagraph, point (b), within six months of the initiation of the selection procedure pursuant to the first subparagraph, point (a).

ESMA shall initiate the first selection procedure pursuant to the first subparagraph, point (c), of this paragraph within three months of the date of application of the delegated act referred to in Article 27(5) and no earlier than six months from the initiation of the selection procedure laid down in the first subparagraph, point (b), of this paragraph.

ESMA shall initiate subsequent selection procedures pursuant to the first subparagraph in time to allow the provision of the consolidated tape to continue without disruption.

2. For each of the asset classes referred to in paragraph 1, ESMA shall select the applicant that is suitable for operating the consolidated tape on the basis of the following criteria:

- (a) the technical ability of the applicant to provide a resilient consolidated tape throughout the Union;
- (b) the capacity of the applicant to comply with the organisational requirements laid down in Article 27h;
- (c) the ability of the applicant to receive, consolidate and disseminate, as applicable:
 - (i) for shares and ETFs, pre-trade and post-trade data;

- (ii) for bonds, post-trade data;
 - (iii) for OTC derivatives, post-trade data;
- (d) the adequacy of the governance structure of the applicant;
- (e) the speed at which the applicant can disseminate core market data and regulatory data;
- (f) the appropriateness of the applicant's methods and arrangements to ensure data quality;
- (g) the total expenditure needed by the applicant to develop the consolidated tape and the costs of operating the consolidated tape on an ongoing basis;
- (h) the level of the fees that the applicant intends to charge to the different types of users of the consolidated tape, the simplicity of its fee and licensing models, and compliance with Article 13;
- (i) for the consolidated tape for bonds, the existence of arrangements for revenue redistribution in accordance with Article 27h(5);
- (j) the use of modern interface technologies by the applicant for the dissemination of core market data and regulatory data and for connectivity;
- (k) the appropriateness of the arrangements put in place by the applicant to keep records in accordance with Article 27ha(3);
- (l) the ability of the applicant to ensure resilience and business continuity, and the arrangements that the applicant intends to put in place to mitigate and address outages and cyber risk;
- (m) the arrangements the applicant intends to put in place to mitigate the energy consumption generated by the collection, processing and storage of data;
- (n) where an application is submitted by joint applicants, the necessity, in terms of technical and logistical capacity, for each of the applicants to apply jointly.
3. The applicant shall provide all the information necessary to enable ESMA to confirm that the applicant has put in place, at the time of the application, all the necessary arrangements to fulfil the criteria laid down in paragraph 2 of this Article and to comply with the organisational requirements laid down in Article 27h.
4. Within six months of the initiation of each selection procedure referred to in paragraph 1, ESMA shall adopt a reasoned decision selecting the applicant that is suitable for operating the consolidated tape and inviting it to submit without undue delay an application for authorisation.

5. Where no applicant has been selected pursuant to this Article or authorised pursuant to Article 27db, ESMA shall initiate a new selection procedure within six months of the end of the unsuccessful selection or authorisation procedure.

229. Recital 26 of [MiFIR amending] Regulation (EU) 2024/791 clarifies that the CTP selection procedure should follow the financial rules applicable to the general budget of the EU, as laid down in Regulation (EU, Euratom) 2018/1046³⁶, also known as the Financial Regulation (FR). In this case, the relevant rules are those applicable to concessions, as ESMA will grant to the successful applicant the right to operate the CTP for a given period of time, subject to subsequent authorisation.
230. Each selection procedure will be launched with the publication of a contract notice and procurement documents in an online platform, including general tendering specifications on the approach to assess criteria, technical specifications on the expectations for each criterion, and standardised forms in which the applicants will be expected to present their offers.
231. The offers from each applicant will be assessed based on three types of criteria:
- **Exclusion criteria:** already defined in the FR, to check whether applicants are allowed to participate in the procedure or to be awarded the contract.
 - **Selection criteria:** based on some of the criteria listed in Article 27da(2) of MiFIR, to check that applicants have the necessary capacity to implement the contract.
 - **Award criteria:** based on the remaining criteria listed in Article 27da(2) of MiFIR, to evaluate the technical and financial offer received from applicants.
232. The FR foresees two procedures for concessions contracts: the open procedure, or standard procedure, whereby all criteria are evaluated at once, and the competitive procedure with negotiations, whereby the exclusion and selection criteria are assessed as a first step, and award criteria are assessed as a second step with a possibility to negotiate with applicants. At this stage, ESMA is considering the choice of the competitive procedure with negotiations for the initial selection for each asset class.

³⁶ Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012.

233. The competitive procedure with negotiation comprises the following steps, to be performed within six months of the publication of the contract notice and procurement documents as set out in Regulation (EU) 2024/791:
- **Applicants to send requests to participate:** such requests should include details based on the exclusion criteria and the selection criteria. The deadline for sending the requests should be set at least 32 calendar days after the contract notice and procurement documents.
 - **Assessment of the requests to participate:** the evaluation committee assesses the applicants based on the exclusion and selection criteria. Only eligible applicants that demonstrate the necessary capacity to implement the contracts will be invited to submit an initial tender.
 - **Applicants to send their initial tenders:** those should include details based on the award criteria. The deadline for sending the initial tender should be set at least 30 calendar days after the invitation to tender.
 - **Evaluation of the initial tenders and negotiations:** the evaluation committee reads all initial offers in their entirety and agrees the scope of negotiations, i.e. agree on which areas the remaining applicants will be allowed to provide clarifications and submit modified tenders as Best and Final Offers (BAFOs). This phase may entail several interactions with the remaining applicants.
 - **Evaluation of the BAFOs:** the evaluation committee agrees on comments and scoring of the BAFOs, based on the predefined award criteria and scoring methodology. The final evaluation report includes an award recommendation for the Authorising Officer.
 - **Award decision signed by the Authorising Officer:** ESMA’s Executive Director as Authorising Officer (AO) signs the award decision, constituting the ‘reasoned decision selecting the applicant that is suitable for operating the consolidated tape’ referred to in Article 27da(4) of MiFIR.
234. The evaluation committee for each selection procedure will be composed of at least three members from two different ESMA departments. The evaluation committee is responsible for evaluating all offers against the criteria set out in the procurement documents, leads the negotiation phase with applicants, drafts the evaluation report and makes a recommendation for award to the AO. It should be noted that only members of the evaluation committee are allowed to look at the applications, and that there can be no discussions on the applications outside of the evaluation committee.
235. In the absence of specific weights per criterion defined in Article 27da(2) of MiFIR, all the listed criteria should be evaluated separately and on an equal footing. The minimum

requirements and the approach to scoring for each criterion, including potential sub-criteria, will be outlined in the procurement documents, and will not be subject to change after the launch of each selection procedure.

7.2 Analysis and proposals

236. With the objective to provide clarity to potential applicants and market participants well ahead of the launch of the first CTP selection procedure, this section presents ESMA's initial reflections on the specification of each criterion listed in Article 27da(2) of MiFIR, including: i) a proposed distinction between selection criterion and award criterion, ii) considerations on the interactions with other assessment criteria and with existing and future provisions in level 1 and level 2 acts, and iii) expectations on minimum requirements and key elements underpinning the scoring methodology.
237. Respondents' feedback on the specification of the criteria will be summarised in a Feedback Statement and will feed into the drafting of procurement documents for each selection procedure. The distinction between selection criteria and award criteria, as well as the minimum requirements and scoring methodology for each criterion, may be set differently for each selection procedure, in light of the specific features of each asset class.
238. For the purpose of this consultation paper, the criteria listed in Article 27da(2) of MiFIR are grouped in five thematic categories, partially reflecting the interlinkages between criteria:
- Resilience, cyber-risk and energy consumption
 - Governance and organisational requirements
 - Ability to process data and dissemination speed
 - Data quality, modern interface and record keeping
 - Costs, fees and revenue redistribution
239. All criteria will however be assessed independently.

Criterion listed in Article 27da(2) of MiFIR	Short name	Thematic category
a) the technical ability of the applicant to provide a resilient consolidated tape throughout the Union;	Resilience	Resilience, cyber-risk and energy consumption

b) the capacity of the applicant to comply with the organisational requirements laid down in Article 27h;	Organisational requirements	Governance and organisational requirements
c) the ability of the applicant to receive, consolidate and disseminate, as applicable: i) for shares and ETFs, pre-trade and post-trade data; ii) for bonds, post-trade data; iii) for OTC derivatives, post-trade data;	Ability to process data	Ability to process data and dissemination speed
d) the adequacy of the governance structure of the applicant;	Governance structure	Governance and organisational requirements
e) the speed at which the applicant can disseminate core market data and regulatory data;	Dissemination speed	Ability to process data and dissemination speed
f) the appropriateness of the applicant's methods and arrangements to ensure data quality;	Data quality	Data quality, modern interface and record keeping
g) the total expenditure needed by the applicant to develop the consolidated tape and the costs of operating the consolidated tape on an ongoing basis;	Expenditure and costs	Costs, fees and revenue redistribution
h) the level of the fees that the applicant intends to charge to the different types of users of the consolidated tape, the simplicity of its fee and licensing models, and compliance with Article 13 [Reasonable Commercial Basis];	Fees and reasonable commercial basis	Costs, fees and revenue redistribution
i) for the consolidated tape for bonds, the existence of arrangements for revenue redistribution in accordance with Article 27h(5);	Revenue redistribution for bonds	Costs, fees and revenue redistribution
j) the use of modern interface technologies by the applicant for the dissemination of core market data and regulatory data and for connectivity;	Modern interface and connectivity	Data quality, modern interface and record keeping
k) the appropriateness of the arrangements put in place by the applicant to keep records in accordance with Article 27ha(3);	Record keeping	Data quality, modern interface and record keeping
l) the ability of the applicant to ensure resilience and business continuity, and the arrangements that the applicant intends to put in place to	Business continuity and cyber risk	Resilience, cyber-risk and energy consumption

mitigate and address outages and cyber risk;		
m) the arrangements the applicant intends to put in place to mitigate the energy consumption generated by the collection, processing and storage of data;	Energy consumption	Resilience, cyber-risk and energy consumption
n) where an application is submitted by joint applicants, the necessity, in terms of technical and logistical capacity, for each of the applicants to apply jointly.	Necessity of joint application	Governance and organisational requirements

7.2.1 Governance and organisational requirements

240. **Organisational requirements:** ESMA proposes that the assessment of the capacity of the applicant to comply with the organisational requirements laid down in Article 27h of MiFIR is considered a selection criterion.
241. The successful applicant must be able to prove that it is capable of complying with the organisational requirements set out in Article 27h of MiFIR. ESMA will therefore assess whether applicants provide the necessary information to satisfy that all of the requirements listed in Article 27h of MiFIR are complied with or can be complied with at the time of the authorisation. This requirement is closely interlinked with most criteria and several other EU legal acts, including MiFIR review level 2 mandates, such as the revenue redistribution scheme for the equity tape.
242. Therefore, when assessing this criterion, ESMA will focus on those requirements which are not overlapping with the other assessment criteria under Article 27da(2) of MiFIR.
243. Applicants will be expected to ensure that, at the time of authorisation, they will be able to comply with each requirement under Article 27h(1) of MiFIR. ESMA understands the close interconnection between some of the criteria under Article 27da of MiFIR and the organisational requirements under Article 27h of MiFIR. As such, ESMA will focus on those requirements under 27h(1) that do not have close links with the other assessment criteria. In particular, ESMA will focus on how the CTP proposes to ensure that retail investors, academics, civil society organisations and competent authorities will benefit from the information from the CTP for free. The CTP should ensure that the conditions under which users can benefit from the tape for free are clear, transparent and easily accessible.
244. Furthermore, closely linked to the provision of free access to retail investors, the CTP should ensure that it can provide market and regulatory data that is usable for all users,

i.e. ensure that regardless of their technical capabilities all users are able to use the data provided by the CTP.

245. Finally, when ensuring they comply with organisational requirements, the CTP for shares and ETFs should lay out their revenue redistribution schemes in a clear and transparent manner, including their compliance with the RTS on the revenue redistribution scheme referred to in Article 27h(8) of MiFIR.
246. For the organisational requirements provisions under Article 27h(1)(a), (d), (f) and (g) of MiFIR, ESMA will rely on the information provided on the assessment criteria on the ability to process data (c), the speed of dissemination (e), data quality (f) and the necessity of joint application (n), respectively.
247. In addition to the requirements under Article 27h(1), ESMA would expect applicants to provide appropriate information on how they intend to guarantee the security of the means of transfer of data to minimise the risk of data corruption and unauthorised access. Applicants should also ensure they have adequate resources and back-up facilities in place to always offer and maintain their services. Applicants can use as reference for this purpose the appropriate EU legislative framework (beyond MiFIR) that will apply to the CTP, such as, the Digital and Operational Resilience Act³⁷ (DORA).
248. ESMA intends to assess the applicants' proposals on how they plan to provide on their website the service level standards, updates, and the list of instruments that will be covered by the tape, in accordance with paragraphs 2 and 4 of Article 27h of MiFIR.

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

249. **Governance structure:** ESMA proposes that the assessment of the adequacy of the governance structure of the applicant is considered an award criterion. An appropriate governance model is paramount to create an effective framework that supports the well-functioning of the tape.
250. The CTP should provide ESMA at the time of application with the necessary information to ensure it complies with the authorisation requirements set out in the RTS on the CTP authorisation. These include information on the organisation and the CTP's corporate governance, as well as its management body and the arrangements in place to identify, manage and disclose existing and potential conflicts of interest.

³⁷ Regulation (EU) 2022/2554 of the European Parliament and of the Council of 14 December 2022 on digital operational resilience for the financial sector and amending Regulations (EC) No 1060/2009, (EU) No 648/2012, (EU) No 600/2014, (EU) No 909/2014 and (EU) 2016/1011, OJ L 333, 27.12.2022, p. 1.

251. In addition, considering the particularity of the CTP framework where ESMA's selection procedure will *de facto* create a time-limited monopoly, ESMA believes that the CTP's governance model should ensure an appropriate level of stakeholder involvement, in particular of data contributors and data users.
252. The CTP's governance structure should enable stakeholders to:
- Make recommendations to the CTP, including on the performance, operation and quality of the tape. These recommendations should be taken into account by the CTP.
 - Receive from the CTP key indicators and information on various areas, including the CTP's costs, the level of fees charged (including any proposed changes to the fee schedule), data quality indicators, technological updates and the quality of the transmission protocol.
 - Be consulted on proposed changes to the revenue distribution mechanism.
253. As an example, the CTP could set up an Advisory Committee, that includes representatives of data users and market data contributors, to ensure that the views of different types of market participants are taken into consideration. The CTP could establish the committee so that it is in place when it starts its operation. In addition, the CTP should reflect on how to ensure an appropriate rotation of the representatives of the committee (for example, it could set up a term of the committee to ensure there are two different Advisory Committees in place for each 5-year term of the tape). ESMA would expect that such a committee warrants neutrality, transparency of decision making, avoidance of conflicts of interest, and accountability of all stakeholders.

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

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

254. **Necessity of joint application:** ESMA proposes that the assessment of the necessity, in terms of technical and logistical capacity, for each of the applicants to apply jointly, for the cases where a joint application is submitted is considered an award criterion.
255. A joint application in this context is to be understood as one or more applicants (or firms) putting together a bid for the consolidated tape under one single entity or under the same name, even if there is no formal agreement between the different parts. An arrangement whereby one firm for example outsources a part of the business to another company, but still applies under its own name should not be considered as a joint application.

256. In those cases where joint applications are submitted, the assessment would be based on the necessity of such arrangement. It is therefore important to assess the reasons for such decision to apply jointly and whether the joint application is key for the success of the application. The main objective of this assessment is to evaluate if joint applications are genuinely needed.
257. ESMA intends to look at the technical and logistical capacity of each applicant to apply independently. Joint applications should be able to provide the necessary information that each applicant brings to the application, including complementary expertise to enhance the final outcome, in particular by emphasising each applicant's specialised knowledge and/or capabilities and identifying the key areas where collaboration between each applicant can contribute decisively to the execution of the project, with higher scores for joint applicants providing more conclusive evidence.
258. In addition, ESMA will consider as a minimum requirement the ability of joint applicants to ensure that potential conflicts of interest are identified and appropriately addressed. It is of pivotal importance that potential conflicts of interest do not disrupt operations or negatively impact market stability.

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

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

7.2.2 Costs, fees and revenue redistribution

259. **Expenditure and costs:** ESMA proposes that the assessment of the total expenditure needed by the applicant to develop the consolidated tape and the costs of operating the consolidated tape on an ongoing basis is considered an award criterion.
260. ESMA deems appropriate to assess this criterion in conjunction with the criterion on governance arrangements set out in point (b) of Article 27da(2) of MiFIR and with the analysis of the organisational requirements set out in points (a), (d), (e) and (f) of Article 27h(1) of MiFIR.
261. In addition, ESMA notes the CTP will be subject to Article 13 of MiFIR on Reasonable Commercial Basis (RCB) and the CTP applicant will need to demonstrate compliance with the RTS on RCB to be developed by ESMA pursuant to Article 13(5) of MiFIR.
262. ESMA's proposal for this assessment would consist of assessing the various aspects of expenditure needed to develop the CT and operating costs in line with the cost elements ESMA proposes in the CP on the draft RTS on RCB.

Total expenditure needed by the applicant to develop the consolidated tape	Costs of operating the consolidated tape on an ongoing basis
<p>Infrastructure costs: costs attributable to physical assets and software licences and leased services or any other infrastructure necessary for the production and dissemination of market data</p>	
<p>Connectivity costs: costs attributable to physical assets, software licenses and leased services which ensure the connectivity necessary for the production and dissemination of market data</p>	
<p>Human resources costs: costs attributable to personnel dedicated to the production and dissemination of market data.</p>	
<p>Financial costs: taxes, depreciation, amortisation and cost of capital</p>	
<p>Other costs: other costs including administrative costs necessary for the production and dissemination of market data.</p>	

263. ESMA recognises that some applicants may already have all or most of the systems in place to operate a CT and would therefore have less development costs compared to applicants designing and developing the CT from the ground up.
264. ESMA is therefore considering awarding a higher weighting to the operating costs compared to the expenditure needed to develop the CT. To improve the comparability, applicants would have to separately report the depreciation and amortisation costs linked to the initial expenditure needed to develop the CT.
265. The scoring methodology would award higher rewards to the lower overall costs needed to recoup annually (expenditure and operating costs), while ensuring that a low level of costs does not impede the operation of the CT. In particular, ESMA will take into account in its assessment the ability for CTP applicants to maintain the quality of services for 5 years, including through investments in innovation.
266. **Fees and Reasonable Commercial Basis:** ESMA proposes that the assessment of the level of the fees that the applicant intends to charge to the different types of users of the core market data, the simplicity of its fee and licensing models, and compliance with Article 13 of MiFIR is considered an award criterion.

267. ESMA deems appropriate to assess this criterion in conjunction with the criterion on governance arrangements set out in point (b) of Article 27da(2) of MiFIR and with the analysis of the organisational requirements set out in points (b) and (c) Article 27h(1) of MiFIR.

268. ESMA proposes a two-fold assessment of this criterion. The first part of the assessment would focus on scoring the simplicity of the applicants' fee's structures, which would depend on:

- | | |
|---|--|
| <p>a) how many tiers of fees the applicant intends to have</p> | <p>the number of tiers will be compared with that of the other candidates and the candidate with the lowest number of tiers will get the highest reward</p> |
| <p>b) how many different types of users of the core market data the applicant identified</p> | <p>the number of user-types identified will be compared with that of the other candidates and the candidate with fewer types of different users will get the higher reward</p> |
| <p>c) how many types of licensing models the applicant's fee's structure has</p> | <p>the number of licensing models will be compared with that of the other candidates and the candidate with fewer types of licensing models will get the higher reward</p> |

269. The second part of the assessment would focus on the ability to comply with Article 13 of MiFIR, based on the following requirements:

- 1) Making available to the public the information published in accordance with Articles 3, 4, 6 to 11a, 14, 20, 21, 27g and 27h of MiFIR on a reasonable commercial basis, including unbiased and fair contractual terms;
- 2) Ensuring non-discriminatory access to the information published in accordance with Articles 3, 4, 6 to 11a, 14, 20, 21, 27g and 27h of MiFIR;
- 3) Providing ESMA with details on the actual costs of producing and disseminating the information published in accordance with Articles 3, 4, 6 to 11a, 14, 20, 21, 27g and 27h of MiFIR, including a reasonable margin.

270. ESMA proposes to assess the intended compliance of the applicants with Article 13 of MiFIR on a high level for the initial selection procedure for bonds, without assessing a detailed level of compliance in view of the absence of an adopted RTS at this point in

time. Once the RTS has been adopted, ESMA intends to assess compliance for this part of the criterion for the subsequent selection procedures on the basis of the RTS.

271. Candidates would be expected to practically showcase their commitment to adhering to and their ability to fulfil the minimum legal prerequisites already at authorisation stages.
272. **Revenue redistribution for bonds:** ESMA proposes that the assessment of the existence of arrangements for revenue distribution in accordance with Article 27h(5) of MiFIR is considered a selection criterion.
273. These arrangements should duly recognise the role that small trading venues play in facilitating undertakings' access to debt issuance for financing purposes, in accordance with Recital (26) of the Amending Regulation (EU) 2024/791.
274. In practice, this means ESMA will only assess whether the applicants for the CT for bonds intend to put in place arrangements for revenue redistribution but will not assess the details of the specific arrangements.
275. Moreover, ESMA does not consider that this criterion should be assessed in conjunction with other criteria.

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?

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.

7.2.3 Ability to process data and dissemination speed

276. **Ability to process data:** ESMA proposes that the ability of the applicant to receive, consolidate and disseminate, as applicable, pre-trade and post-trade data is considered an award criterion.
277. The requirements for the process of ingestion, consolidation, and dissemination of data will be defined by the RTS mandated by Article 22b(3) of MiFIR. ESMA proposes to consider the criterion set out in point (c) of Article 27da(2) of MiFIR instrumental in assessing to what extent the technological infrastructure of the applicants will be suitable to comply with those requirements.

278. ESMA intends to evaluate applicants based on their demonstrated capability in three key areas:
- **Data reception.** Assessing the applicant's technological capability to receive large amounts of data from various data contributors. This includes evaluating the effectiveness of the applicant's systems for data ingestion and acquisition protocols.
 - **Data consolidation.** Examining how the applicant's technological infrastructure enables the consolidation of input data. This involves evaluating the applicant's systems for data integration and interoperability.
 - **Data dissemination.** Evaluating the efficiency of the applicant's data dissemination mechanisms. This encompasses assessing the applicant's data distribution infrastructure and network capacity.
279. ESMA suggests giving preference based on the robustness and efficiency of the applicant's technological infrastructure in handling input and output data. In particular, technologies that excel in processing large amounts of data with high speed, whilst ensuring accuracy and security would be scored higher. Applicants demonstrating superior performance in ingesting, consolidating, and disseminating market data using such advanced technologies would receive higher scores under this criterion.
280. To be noted that this criterion should be assessed in conjunction with the data quality criterion set out in point (f) of Article 27da(2) of MiFIR. While the criterion set out in point (c) focuses on the technological aspects of handling input and output data, the criterion on data quality emphasises the policies and procedures for ensuring the correct functioning of the CTP.
281. Additionally, the assessment of the criterion on the ability to process data involves dependencies with the criterion on modern interface and connectivity set out in point (j) of Article 27da(2) of MiFIR. This criterion would be considered a basic requirement for applicants, meaning that applicants not adopting adequate technologies for the dissemination of data would not be considered eligible for moving to the second stage of the selection procedures. Differently, ESMA suggests to evaluate the criterion on the ability to process data) holistically, taking into account not only the applicant's capabilities in efficiently disseminating data to market participants but also the technologies used for the ingestion and consolidation of data. This would ensure that the applicant's technological infrastructure is comprehensive and cohesive across all stages of the data lifecycle, from reception to dissemination.

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?

282. **Dissemination speed:** ESMA proposes that the speed at which the applicant can disseminate core market data is considered an award criterion.
283. Given the significance of data dissemination speed in ensuring timely access to market information, ESMA will prioritise applicants who provide concrete evidence that their dissemination systems ensure low latency. Higher speeds will correspond to higher scores in the evaluation process. However, acknowledging the varying sensitivities to latency across different asset classes (for instance, equity information being more time-sensitive), ESMA is considering calibrating the unit of measures for the assessment of this criterion on the basis of the asset class (e.g. in the context of the equity CTP by setting lower thresholds of dissemination speed in order to have higher scores).
284. Additionally, ESMA considers it appropriate to assess this criterion in conjunction with the criterion on data quality set out in point (f) of Article 27da(2) of MiFIR. Focusing solely on speed may indeed lead to compromises in data quality, as there may be less time available for thorough validation and verification processes. In such cases, data may be disseminated quickly but with a higher risk of inaccuracies, errors, or inconsistencies. Conversely, prioritising data quality may result in slower dissemination speeds, as more time and resources are allocated to ensure the accuracy, completeness, and reliability of the data being disseminated. This could potentially impact the timeliness of information delivery to market participants, particularly in fast-moving markets where split-second decisions are critical. Therefore, balancing speed and data quality is essential to meet the needs of market participants effectively. This consideration should be reflected in the assessment of the application ensuring that both aspects are appropriately prioritised in the selection process.

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).

7.2.4 Data quality, modern interface and record-keeping

285. **Data quality:** ESMA proposes that the assessment of the appropriateness of the applicant's methods and arrangements to ensure data quality is considered an award criterion.
286. Ensuring data quality throughout all the steps of receiving, consolidating and disseminating data is essential for the CTP to meet the objectives set out by MiFIR of establishing a reliable consolidated source of information for market participants.

287. Minimum requirements for methods and arrangements ensuring data quality are to be specified in RTS developed by ESMA pursuant to Article 22b of MiFIR. These requirements will serve as a baseline for evaluating the adequacy of the applicant's methods and arrangements for data quality assurance.
288. ESMA proposes to assess the intended compliance of the applicant with Article 22b of MiFIR on a high level for the initial selection procedure for bonds, without assessing a detailed level of compliance in view of the absence of an adopted RTS. Once the RTS has been adopted, ESMA intends to assess compliance for this part of the criterion for the subsequent selection procedures on the basis of the RTS.
289. However, recognising the critical role of robust data quality measures in improving market transparency and efficiency, ESMA proposes to reward any indications provided by CTP applicants that go beyond the minimum data quality requirements prescribed by the RTS. This can be indicated in two ways:
- by offering a more detailed or comprehensive elaboration of the requirements prescribed on data quality measures. CTP applicants who provide a thorough and detailed plan for implementing data quality assurance measures, including specific and concrete strategies for addressing potential challenges or shortcomings, would be recognised for their commitment to keep high data quality standards;
 - by proposing additional measures not envisaged by the (draft) RTS to ensure data quality dimensions such as accuracy, consistency, and timeliness of input and output data. Applicants who demonstrate a proactive approach to enhancing data quality beyond the minimum requirements would be given favourable consideration.
290. The assessment of the ability to process data in accordance with the criterion set out in point (c) of Article 27da(2) of MiFIR will provide indications on the level of technological appropriateness of the applicant to perform the core functions of the CTP, including data quality assurance. For this reason, ESMA deems necessary to assess the criterion on data quality set out in point (f) of Article 27da(2) of MiFIR in conjunction with the criterion the ability to process data set out in point (c) of Article 27da(2) of MiFIR. Additionally, considering the potential trade-off between the speed of dissemination and the efficacy of data quality arrangements, ESMA should assess this criterion also in conjunction with the criterion on the dissemination speed set out in point (e) of Article 27da(2) of MiFIR.
291. **Modern interface and connectivity:** ESMA proposes that the assessment of the use of modern interface technologies by the applicant for the provision of the core market data and for connectivity is considered a selection criterion.

292. Ensuring seamless connectivity is crucial for the CTP to effectively fulfil its role in providing timely and accurate market data to market participants. Therefore, ESMA intends to consider as eligible only applications from CTP candidates providing compelling evidence of the use of interface technologies that fulfil requirements in terms of:
- **Reliability:** The capability of the technology to consistently provide connectivity services without disruption or failure.
 - **Scalability:** The ability of the technology to accommodate increasing data volumes and user demand while maintaining performance levels.
 - **Low Latency:** The technology's ability to transmit data with minimal delay or latency, ensuring timely delivery of market data to users.
 - **Security:** The implementation of robust security measures to protect data transmission from unauthorised access, interception, or manipulation.
293. ESMA considers it appropriate to assess this criterion in conjunction with the criteria on resilience and on the ability to process data set out in points (a) and (c) of Article 27da(2) of MiFIR.
294. **Record keeping:** ESMA proposes that the assessment of the appropriateness of the arrangements put in place by the applicant to preserve records for the purposes of Article 27ha(3) of MiFIR is considered a selection criterion.
295. Therefore ESMA would consider only those applications meeting this criterion where the supporting documentation provides clear and concrete evidence of intended compliance with the organisational requirements provided by Article 27ha(3) of MiFIR on record-keeping.

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?

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?

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

7.2.5 Resilience, cyber-risk and energy consumption

296. **Resilience:** ESMA proposes that the technical ability of the applicant to provide a resilient consolidated tape throughout the Union is considered a selection criterion.
297. ESMA considers appropriate to assess this criterion in conjunction with the criteria on modern interface and connectivity and on business continuity and cyber-risk set out points (j) and (l) of Article 27da(2) of MiFIR.
298. ESMA proposes that the assessment of this criterion is based on the minimum requirements on ICT risk management (including ICT third-party risk), ICT-related incident management, and digital operational resilience testing that will be applicable to CTPs in accordance with the Digital Operational Resilience Act (DORA).
299. CTP applicants would be required to provide clear and concrete evidence of intended compliance with these minimum DORA requirements with supporting documentation.
300. **Business continuity and cyber risk:** ESMA proposes that the ability of the applicant to ensure resilience and business continuity, and the process the applicants intend to put in place to mitigate and address outages and cyber-risk, is considered an award criterion.
301. ESMA considers appropriate to assess this criterion in conjunction with the resilience criterion set out in point (a) of Article 27da(2) of MiFIR.
302. ESMA proposes that the assessment of this criterion is based on a qualitative scoring of CTP applicants' intended solutions not only to comply with DORA minimum requirements, but also to apply additional commitments and measures to mitigate and address outages and cyber-risk, either inspired from DORA requirements that are not mandatory for CTPs, and from other relevant frameworks.
303. CTP applicants would be required to describe and document the processes and solutions that they intend to put in place. Higher scores will be awarded to those CTP applicants whose processes and solutions are considered superior.

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?

304. **Energy consumption:** ESMA proposes that the assessment of the process to mitigate the energy consumption generated by the collecting, processing and storage of data is considered an award criterion.

305. ESMA does not consider that this criterion should be assessed in conjunction with other criteria.
306. In order to ensure consistency with EU legislation on sustainability , ESMA proposes that the assessment of this criterion is anchored in the technical screening criteria for activity 8.1 'Data processing, hosting and related activities' as defined in the Taxonomy Regulation Climate Delegated Regulation³⁸.
307. In more detail, the practices listed as 'expected practices' in the most recent version of the European Code of Conduct on Data Centre Energy Efficiency (EU CoC for Data Centres) (i.e. the latest version published at the Joint Research Centre (JRC) European Energy Efficiency Platform (E3P) website³⁹) would be used as a key performance indicator (KPI) on which CTP applicants should report in order to facilitate the assessment of the level of efficiency of a data centre in relation to its energy consumption.
308. The EU CoC for Data Centres draws on the Power Utilisation Effectiveness (PUE) as a key metric to assess the overall efficiency of a data centre. In 2016, this metric was published both as a global standard under [ISO/IEC 30134-2:2016](#) and as a European standard under [EN 50600-4-2:2016](#).
309. The PUE is designed to be applicable to all types of data centres, and technology and geographical neutral.
310. The PUE is expressed as a ratio and, subject to the further methodological specifications laid down in the European guidelines EN 50600-4-2:2016, it is obtained by dividing the total power input of a data centre by the energy used to run the IT equipment within the data centre facilities. Namely,

$$PUE = \frac{E_{DC}}{E_{IT}}$$

where E_{DC} represents the total annual data centre energy consumption in kWh and E_{IT} represents the annual IT equipment energy consumption in kWh.

311. The overall efficiency of a data centre is considered to improve the closer the PUE is to 1.0. In other words, lower values of the PUE indicate higher efficiency levels of a facility. A PUE that is equal to 1.0 represents a perfectly efficient data centre (i.e., almost of all the power is delivered to IT equipment). As a reference, it is considered that EU data

³⁸ Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives.

³⁹ <https://e3p.jrc.ec.europa.eu/communities/data-centres-code-conduct>

centres currently have an average PUE of 1.6 and some continue to report values above 2.0⁴⁰.

312. ESMA proposes that CTP applicants report the expected PUE of the data centre facilities from which they will provide their services as a CTP on average for five years of operation. CTP applicants reporting a lower PUE (i.e., closer to 1.0) would be awarded a higher score than those reporting a higher PUE (i.e., further away from 1.0).

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?

⁴⁰ [The EU Code of Conduct for Data Centres – towards more innovative, sustainable and secure data centre facilities - European Commission \(europa.eu\)](#)

8 Annexes

8.1 Annex I – Summary of 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?

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?

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?

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.

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.

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.

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.

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

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

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.

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.

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?

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?

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

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

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

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?

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

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.

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.

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.

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

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.

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.

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.

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.

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.

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).

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.

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

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?

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?

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?

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?

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?

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?

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.

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.

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

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

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

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.

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

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

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

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

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

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

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

Q49: Do you have any further comments or suggestions on the draft RTS? Please elaborate your answer.

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?

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

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

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

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

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?

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.

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?

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).

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?

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?

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

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?

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?

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.

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.

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?

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?

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.

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.

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.

8.2 Annex II – Cost-Benefit Analysis

A detailed CBA will be published together with the ESMA Final Report.

The final CBA will include the feedback received from stakeholders to provide a refined assessment of the impact of the ESMA proposal on market participants. To that end market participants are invited to respond to the question below.

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.

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.

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?

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?

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.

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.

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.

8.3 Annex III – Draft Technical Standards

8.3.1 Draft RTS on input and output data of CTPs

COMMISSION DELEGATED REGULATION (EU) 2024/XXX of XXXX

supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on the quality of the transmission protocol, measures to address erroneous trade reporting and enforcement standards in relation to data quality, and quality and substance of the data for the operation of the consolidated tapes

(Text with EEA relevance)

THE EUROPEAN COMMISSION,
Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 2024/791 and in particular Article 22b thereof,

Whereas:

- (1) Defining clear and harmonised reporting instructions for data to be transmitted to and disseminated by the CTPs is a key element for the orderly functioning of CTPs and effective and reliable data consolidation.
- (2) To achieve fast, secure and high-quality data transmission to the CTP, the transmission protocols chosen by data contributors should fulfil certain minimum requirements in terms of performance, security, reliability, and compatibility with other systems and applications supporting the reporting process. Upholding these standards is necessary to guarantee the integrity, accuracy, and timeliness of market data disseminated by the CTP.
- (3) To ensure timely availability of consolidated market data to investors, data contributors should be subject to strict submission latency requirements. Such requirements should however be calibrated to the varying degrees of time-sensitivity in market data. Consequently, pre-trade data necessitates more stringent requirements compared to post-trade data.
- (4) The adoption of a standardised data format for the transmission of data to the CTP facilitates efficient reception and storage of input data. Additionally, adopting an harmonised

format for data transmission streamlines the operations of CTPs in consolidating data in a cost-efficient manner, reducing complexity, and enhancing overall operational effectiveness.

(5) The content of the data to be transmitted to the CTPs should be defined with the objective of minimising reporting burden for data contributors while facilitating the dissemination of data essential for investors. In defining the input data fields functional to the production of core market data, consistency should be ensured with the existing pre- and post-trade requirements provided by the Commission Delegated Regulation (EU) 2017/587 and Commission Delegated Regulation (EU) 2017/583 respectively for equity and non-equity instruments.

(6) The definition of regulatory data to be transmitted to the CTPs encompasses a new set of information enabling investors to be informed about the status of individual financial instruments traded on a given trading venue, which includes details on trading suspension, removal, or halts. Additionally, regulatory data covers the status of system matching orders, including information on outages or normal trading phases, enabling investors to make well-informed decisions in varying market conditions.

(7) The dissemination of output data should occur thorough presentation methods that ensure both machine and human readability. To achieve this objective, requirements are prescribed to fulfil various degrees of abilities of data users. To cater for diverse user needs, the dissemination of output data as should be provided in multiple formats, including [PLACHEOLDER OF FORMAT] for advanced analysis, CSV format for less advanced users, and a graphical user interface (GUI) for ensuring human readability.

(8) The CTP is entrusted with the responsibility to ensure data quality on the input side, encompassing content, format, and timeliness checks. This obligation involves communicating potential data quality issues to data contributors and facilitating the resubmission of corrected trade reports. In the event of serious data quality breaches, the CTP as are expected to trigger enforcement measures in a non-discriminatory manner, which include the suspension of revenue redistribution or notification to competent authorities. Additionally, the CTP is expected to perform regular checks on the quality output data, ensuring periodic reconciliation with the input data.

(9) This Regulation is based on the draft regulatory technical standards submitted by the European Securities and Markets Authority (ESMA) to the Commission.

(10) ESMA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council.

HAS ADOPTED THIS REGULATION:

Article 1

Definitions

For the purpose of this Regulation, the following definitions shall apply:

- (a) “input data” means data transmitted by data contributors to the CTP, in accordance with Article 22a(1) of Regulation (EU) No 600/2014;
- (b) “output data” means data disseminated by the CTP, in accordance with Article 27h(1)(d) of Regulation (EU) No 600/2014.

Article 2

Minimum requirements for the quality of transmission protocols

1. For the purpose of the transmission of input data, data contributors shall offer the CTP at least one transmission protocol compliant with the minimum requirements specified in Tables 1,2,3 and 4 of Annex I.
2. Upon agreement on the selected transmission protocol for the transmission of input data, the CTP and data contributors shall ensure that the requirements provided by paragraph 1 are consistently met without interruption.

Article 3

Real time transmission of data to the CTP

1. Data contributors shall transmit pre-trade input data to the CTP for shares and ETFs as close to real-time as is technically possible and in any case no later than 50 milliseconds after the timestamp of the order.
2. Data contributors shall transmit post-trade input data related to transactions executed on a trading venue to the CTPs as close to as close to real-time as is technically possible and in any case within 100 milliseconds after the timestamp of the execution of the relevant transaction.
3. Data contributors shall transmit post-trade input data related to transactions executed outside of a trading venue to the CTPs as close to real time as is technically possible and in any case within 200 milliseconds after the timestamp of the execution of the relevant transaction.

Article 4

Data standards and format for the transmission of input data

Data contributors shall transmit input data to the data centre of the CTP in a common standard [PLACEHOLDER - *Name of the most suitable data format emerging from the consultation*] format.

Article 5

Data to be transmitted to the CTP for bonds

1. With regards to core market data for a given bond, data contributors shall transmit to the data centre of the CTP, by reference to each transaction, the details set out in Table 2 of Annex II of Commission Delegated Regulation (EU) 2017/583.
2. With regards to regulatory data, data contributors shall transmit to the data centre of the CTP, by reference to each financial instrument, the details set out in Table 2 of Annex II.
3. With regards to regulatory data, data contributors shall transmit to the data centre of CTP, by reference to each trading system, the details set out in Table 3 of Annex II.

Article 6

Data to be transmitted to the CTP for shares and ETFs

1. [PLACEHOLDER – *Proposal on input equity fields to be provided in a separate consultation – Any relevant details will be provided by Annex III of this RTS*]

Article 7

Data to be disseminated by the CTP for bonds

1. With regards to core market data for a given bond, the CTP shall disseminate by reference to each transaction the details set out in:
 - (i) Table 2 of Annex II of Commission Delegated Regulation (EU) 2017/583;
 - (ii) Table 4 of Annex II.
2. With regards to regulatory data relating to bonds, the CTP shall disseminate:
 - (a) by reference to each financial instrument, the details set out in Table 2 of Annex II.
 - (b) by reference to each trading system, the details set out in Table 3 of Annex II.

Article 8

Data to be disseminated by the CTP for shares and ETFs

1. *[PLACEHOLDER – Proposal on output equity fields to be provided in a separate consultation - Any relevant details will be provided by Annex III of this RTS]*

Article 9

Dissemination of output data to ensure machine-readability and human-readability

1. The CTP shall disseminate the output data in a Graphical User Interface (GUI) to ensure human readability.
2. The CTP shall also disseminate the output data in the following two formats simultaneously:
 - (a) Comma-Separated Values (CSV)
 - (b) *[PLACEHOLDER – It is proposed to disseminate output data in the same format prescribed for input data]*
3. CTPs shall:
 - (a) make instructions available to the public, explaining how and where to easily access and use the data, including identification of the electronic format;
 - (b) make public any changes to the instructions referred to in point (a) at least three months before they come into effect, unless there is an urgent and duly justified need for changes in instructions to take effect more quickly;
 - (c) include a link to the instructions referred to in point (a) on the homepage of their website.

Article 10

Management of incomplete or potentially erroneous information by CTPs

1. CTPs shall set up and maintain appropriate arrangements to ensure that they accurately publish the information received from data contributors without themselves introducing any errors or omitting information and shall correct information where they have themselves caused the error or omission.

2. CTPs shall continuously monitor in real-time the performance of their IT systems ensuring that the input data they have received have been successfully consolidated and published.
3. CTPs shall perform periodic reconciliations between the input data they receive and the output data that they publish, verifying the correct publication of the information.
4. A CTP shall confirm the receipt of input data to the reporting data contributor, including the transaction identification code assigned by the CTP. A CTP shall refer to the transaction identification code in any subsequent communication with the data contributor in relation to a specific set of information reported.
5. A CTP shall set up and maintain appropriate arrangements to identify receipt input data that are incomplete, does not adhere to the formats prescribed by Articles 5 and 6, or contain information that is likely to be erroneous. These arrangements shall include automated price and volume alerts, taking into account:
 - (a) the sector and the segment in which the financial instrument is traded;
 - (b) liquidity levels, including historical trading levels;
 - (c) appropriate price and volume benchmarks;
 - (d) if needed, other parameters according to the characteristics of the financial instrument.
6. Where a CTP determines that the input data it receives is incomplete or contains information that is likely to be erroneous, it shall not publish that information and shall promptly alert the data contributor submitting the input data.
7. Upon receiving notification of a data quality issue, data contributors shall acknowledge the issue and, if necessary, shall initiate the process of resubmitting corrected data.
8. A CTP shall monitor the timeliness of input data received by data contributors for the identification of serious and repeated breaches of timeliness requirements provided by Article 3.
9. In exceptional circumstances CTPs shall delete and amend information in a trade report upon request from the data contributor providing the information when that entity cannot delete or amend its own information for technical reasons.
10. CTPs shall have in place interactive communication mechanisms with their clients through which data users may flag to the CTP potential inaccuracies in the dissemination of output data.

11. CTPs shall publish non-discretionary policies outlining the procedure underpinning the activation of enforcement measures provided by Article 27h(8)(c) and Article 22a(8) of Regulation (EU) No 600/2014.

Article 11

Entry into force and application

1. This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union. It shall apply from [DD MM 2025].

2. This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, [DD MM 2024]

For the Commission

The President

[For the Commission

On behalf of the President

[Position]

ANNEX I

Minimum requirements for the quality of the transmission protocols

Table 1

Performance requirements

Metrics/ features	Minimum requirements
Latency	Latency shall be maintained below 100 milliseconds.
Throughput	Throughput shall exceed 100 Megabits per second (Mbps).
Connection setup time	Round Trip Time (RTT) for connection setup shall be less than 500 milliseconds.
Scalability	The protocol must support operation in clustered or load-balanced environments.

Table 2

Reliability requirements

Metrics / features	Minimum requirements
Error detection mechanism	The protocol shall include error detection mechanisms to ensure accurate identification of data transmission errors.
Error correction mechanism	The protocol shall incorporate error correction mechanisms to automatically rectify detected errors.
Recovery mechanism	The protocol shall feature recovery mechanisms to swiftly recover from transmission failures or interruptions, ensuring seamless continuity of data transmission operations.

Table 3

Security requirements

Metrics / features	Minimum requirements
Secure transport layer	The protocol shall support a secure transport layer to ensure the confidentiality of data during transmission.
Authentication	The protocol shall support authentication credentials-based or certificate-based authentication mechanisms to verify the identity of communicating parties.

Authorisation	The protocol shall implement authorisation mechanisms to control access to specific resources or functionalities based on user roles or permissions.
Non-repudiation	The protocol shall incorporate non-repudiation mechanisms to ensure that the originator of a message cannot deny sending it.

Table 4

Compatibility requirements

Metrics / features	Minimum requirements
Open solution	The implementation of the protocols shall adhere to non-proprietary standards
Interoperability	The protocol shall support at least one widely recognised internet standard

ANNEX II

Data to be transmitted to and disseminated by the CTP for bonds

Table 1

Symbol table for Table 2, 3 and 4

Symbol	Data Type	Definition
{DATE_TIME_FORMAT}	ISO 8601 date and time format	Date and time in the following format: YYYY-MM-DDThh:mm:ss.dddZ. — 'YYYY' is the year; — 'MM' is the month; — 'DD' is the day; — 'T' — means that the letter 'T' shall be used — 'hh' is the hour; — 'mm' is the minute; — 'ss.ddd' is the second and its fraction of a second; — Z is UTC time.

		Dates and times shall be reported in UTC.
{ISIN}	12 alphanumerical characters	ISIN code, as defined in ISO 6166
{MIC}	4 alphanumerical characters	ISIN code, as defined in ISO 6166

Table 2

Regulatory data specific to an instrument

#	Field identifier	Description	Format as defined in Table 1
1	Instrument identification code	Code used to identify the financial instrument	{ISIN}
2	Instrument status start date and time	Date and time from which the instrument status is valid	{DATE_TIME_FORMAT}
3	Instrument status end date and time	Date and time from which the instrument status is no longer valid	{DATE_TIME_FORMAT}
4	Instrument status dissemination date and time	Date and time on which the instrument status is disseminated by the CTP	{DATE_TIME_FORMAT}
5	Instrument status	Description of the status of the financial instrument. The status of the financial instrument can be: (1) suspended from trading, on the trading venue identified in the field "Trading venue", in accordance with Article 32 and 52 of Directive 2014/65/EU (2) removed from trading, on the trading venue identified in the field "Trading venue", in accordance with Article 32 and 52 of Directive 2014/65/EU (3) subject to a trading halt, on the trading venue identified in the field "Trading venue", in accordance with Articles 18(5) and 48(5) of Directive 2014/65/EU	'SUSP' – the instrument is suspended 'RMOV' – the instrument is removed 'HALT' – the instrument is subject to a trading halt
6	Trading venue	Identification of the trading venue on which the instrument status is valid (segment MIC where available, otherwise operating MIC) The trading venue is a regulated market, an MTF or an OTF.	{MIC}

Table 3

Regulatory data specific to a trading system

#	Field identifier	Description	Format
1	Trading venue	Identification of the trading venue on which the instrument status is valid (segment MIC where available, otherwise operating MIC). The trading venue is a regulated market, an MTF or an OTF.	{MIC}
2	Trading system type	Type of trading system on which the system status is provided	'CLOB' -- central limit order book trading systems 'QDTS' -- quote driven trading systems 'PATS' -- periodic auction trading systems 'RFQT' -- request for quote trading systems 'VOIC' -- voice trading system 'HYBR' -- hybrid trading system 'OTHR' -- any other trading system
3	System status start date and time	Date and time from which the system status is valid	{DATE_TIME_FORMAT}
4	System status end date and time	Date and time from which the system status is no longer valid	{DATE_TIME_FORMAT}
5	System status dissemination date and time	Date and time on which the system status is disseminated by the CTP	{DATE_TIME_FORMAT}
6	System status	Description of the status of the trading system. The trading system can be: (1) subject to an outage; or (2) in one of the following trading phase: pre-opening, opening auction, trading, closing auction, trading-at-last, closed.	[Code to be determined]

Table 4

Post-trade core market data

#	Field identifier	Description	Format as defined in Table 1
1	Dissemination date and time	Date and time when the data related to the transaction was disseminated by the CTP to the subscribers	{DATE_TIME_FORMAT}

ANNEX III

Data to be disseminated by the CTP for shares and ETFs

[PLACEHOLDER – Proposal on input and output equity fields to be provided in a separate consultation - Any relevant details will be provided by Annex III of this RTS]

8.3.2 Draft RTS on the revenue distribution scheme of CTPs

COMMISSION DELEGATED REGULATION (EU) 2024/XXX

of XXXX

supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on the revenue distribution scheme

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 2024/791, and in particular Article 27h(8), last subparagraph, thereof,

Whereas:

(1) The revenue distribution scheme is a key element for the successful set-up of a consolidated tape in shares and exchange traded funds (ETFs). Properly rewarding small trading venues, those which provide transparent trading and contribute to the listing of new shares in the Union is essential to ensure the right incentive to those venues to decide to contribute to the consolidated tape to ensure full coverage of the Union markets.

(2) To ensure the fair treatment of all trading venues across the Union contributing data to the consolidated tape provider (CTP) for shares and ETFs it is crucial to clearly specify the methodology that the consolidated tape should apply when distributing part of its revenues to data contributors. Therefore, it is necessary to further specify the precise types of transactions to be included or excluded, added or subtracted by the CTP for the calculations of the turnover measures defined in Article 27h(7) of MiFIR and, the frequency at which the CTP should determine the relative share of (or percentage of) revenue to be distributed per eligible trading venue.

(3) The weight to apply for the determination of part of the revenues to distribute has been specified by ESMA so that they meet two conditions. Firstly, they maximise the relative share of revenues that a contributing trading venue meeting all criteria would have received among different scenarios analysed. Secondly, the weights sum up to 10, being the equivalent to 100%. The set of weights applied differed under each scenario, all else being equal that satisfy

these conditions are 4.5, 4.0 and 1.5 for the criterion in Article 27h(6) points (a), (b) and (c) respectively.

(4) It is necessary to ensure that the CTP uses the suspension of the revenue redistribution scheme in an equitable manner to deter serious and repeated breaches of the data requirements specified in Articles 22a, 22b, and 22c of MiFIR. To this end, this Regulation specifies the criteria and the circumstances that the CTP should take into account when deciding to temporarily suspend the participation of data contributors in that scheme. The CTP should supplement and complement these criteria and circumstances to ensure the decision to suspend and the duration of the suspension take into consideration the seriousness of the breach, its impact on the revenue redistribution scheme, and any corrective actions put in place by the data contributor.

(5) The revenue redistribution scheme should foster an on-going dialogue between the CTP and each data contributor on the quality of data submitted, with the suspension of redistribution only used as a measure of last resort. To this end, this Regulation specifies minimum requirements ensuring that the process for suspending a data contributor from that scheme is transparent, non-discriminatory, fair and efficient. In particular, the CTP should share with suspended data contributors the information supporting the suspension, and allow data contributors to submit additional information to the CTP.

(6) In cases where the CTP confirms its decision to suspend a data contributor from the revenue redistribution scheme, the retained revenue should be redistributed to the other data contributors in the redistribution window immediately following the final decision.

(7) In cases where the CTP revises its decision to suspend a data contributor from the revenue redistribution scheme based on the additional information shared by that data contributor, the retained revenue should be redistributed to that data contributor at the next redistribution window following the final decision, with interest corresponding to the average rate of the ECB's deposit facility during the suspension period.

(8) This Regulation is based on the draft regulatory technical standards submitted by the European Securities and Markets Authority (ESMA) to the Commission.

(9) ESMA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Securities and Markets Stakeholder Group established in

accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council⁴¹.

HAS ADOPTED THIS REGULATION:

Article 1

Determination of revenue to be distributed and of eligible data contributors for the purpose of the revenue distribution scheme

(Article 27h(8)(b) of Regulation (EU) No 600/2014)

1. For the purposes of redistributing part of its revenues generated by the consolidated tape to data contributors, the CTP shall in a first step determine:

(a) the amount of revenues to be distributed based on the total revenues generated by the CTP over the assessment period as specified by the CTP; and

(b) the list of data contributors that are regulated markets, MTFs or SME growth markets and that transmitted data to the CTP over the assessment period, either for the full period or for part of it.

Article 2

Methodology for calculating the amount of revenues to be redistributed under 27(h)(6)(a) of MiFIR is met and weighting assigned to this criterion

(Article 27h(8)(a) and (b) of Regulation (EU) No 600/2014)

1. For the purposes of the revenues to be distributed to contributors included in the list referred to in point (b) of Article 1 the CTP and meeting the requirements under Article 27h(6)(a) of Regulation (EU) No 600/2014, the CTP shall determine the total annual trading volume generated in shares for each data contributor by summing each transaction record received by that data contributor

2. The CTP shall determine the total annual trading volume in shares in the EU by summing all transaction records received by each EU trading venue and approved publication arrangement.

3. For the purpose of the calculations in paragraphs 1 and 2, transactions flagged as NPFT and CONT, per Table 4 of Annex I of Commission Delegated Regulation (EU) No

⁴¹ Regulation (EU) No 1095/2010 of the European Parliament and of the Council of 24 November 2010 establishing a European Supervisory Authority (European Securities and Markets Authority), amending Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC (OJ L 331, 15.12.2010, p. 84).

2017/587 shall be excluded, transactions flagged as “CANC” per Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 shall be subtracted and transactions flagged as “AMND” per Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 shall be added. Whenever a transaction is flagged with several flags, if one of them requires exclusion from the calculations, such flag should prevail for the purposes of this calculation.

4. To determine whether data contributors included in the list in Article 1(b) are meeting the criterion set out in Article 27h(6)(a) of Regulation (EU) No 600/2014, the CTP shall divide the amount determined under paragraph (1) by that determined under paragraph (2) for each operating MIC.

5. For those data contributors meeting the criterion set in Article 27h(6)(a) of Regulation (EU) No 600/2014, the CTP shall apply a weight of 4.5.

Article 3

Methodology for calculating the amount of revenues to be redistributed under Article 27(h)(6)(b) of MiFIR is met and weighting assigned to this criterion

(Article 27h(8)(a) and (b) of Regulation (EU) No 600/2014)

1. To determine whether data contributors included in the list referred to in point (b) of Article 1 are meeting the criterion set out in Article 27h(6)(b) of Regulation (EU) No 600/2014 the CTP shall for each data contributor not meeting the conditions in Article 27h(6)(a) of Regulation (EU) No 600/2014:

(a) assess whether the data contributor on the basis of the information provided per financial instrument for Fields 11 [First admission to trading], 12 [Termination date] and Field 6b [Venue of admission to trading] as per Table 2 of the Annex in Commission Delegated Regulation (EU) 2017/585 - RTS 23 provides admission to trading of shares or ETFs on 27 March 2019 or thereafter; and

(b) for those data contributors not meeting the conditions in Article 27h(6)(a) of Regulation (EU) No 600/2014, determine the total annual trading volume covering all financial instruments meeting the conditions specified under point a.

(c) for those data contributors meeting the conditions in Article 27h(6)(a) of Regulation (EU) No 600/2014, determine the total annual trading volume generated in shares and ETFs by summing each transaction record received by that data contributor.

(d) For the purpose of the calculations in points (b) and (c), transactions flagged as NPFT and CONT per Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 shall be excluded, transactions flagged as “CANC” per Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 shall be subtracted and transactions flagged as

“AMND” per Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 shall be added. Whenever a transaction is flagged with several flags, if one of them requires exclusion from the calculations, such flag should prevail for the purposes of this calculation.

2. For data contributors with instruments meeting the criterion set in Article 27h(6)(b) of Regulation (EU) No 600/2014 identified by segment MIC and, by operating MIC whenever there is no segment MIC, the CTP shall apply a weight of 4.0.

Article 4

Methodology for calculating the amount of revenues to be redistributed under Article 27(h)(6)(c) of MiFIR is met and weighting assigned to this criterion

(Article 27h(8)(a) and (b) of Regulation (EU) No 600/2014)

1. To determine whether data contributors included in the list referred to in point (b) of Article 1 are meeting the criterion set out in Article 27h(6)(c) of Regulation (EU) No 600/2014 the CTP shall for each data contributor:

(a) determine the total annual pre-trade transparent trading volume generated in shares and ETFs recorded per financial instrument by each data contributor separately.

(b) For the purpose of this calculation, the CTP shall include all transaction records received by the trading venue which are not flagged as NPTF, CONT, PRIC, RFPT, NLIQ, OILQ as defined in Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 as well as those flagged as NTLS as defined in Table 2 of Annex III of [input/output data RTS], transactions flagged as “CANC” per Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 shall be subtracted and transactions flagged as “AMND” per Table 4 of Annex I of Commission Delegated Regulation (EU) No 2017/587 shall be added. Whenever a transaction is flagged with several flags, if one of them requires exclusion from the calculations, such flag should prevail for the purposes of this calculation.

2. For data contributors with trading volume meeting the criterion set in Article 27h(6)(c) of Regulation (EU) No 600/2014 identified by segment MIC and, by operating MIC whenever there is no segment MIC, the CTP shall apply a weight of 1.5.

Article 5

Methodology for determining the amount of the revenue to be redistributed to data contributors

(Article 27h(8)(b) of Regulation (EU) No 600/2014)

1. For each data contributor included in the list referred to in point (b) of Article 1, the CTP shall sum the results of the multiplications of the weights set out in Articles 2 to 4 by the trading volumes as set out in Article 27h(7) of Regulation (EU) No 600/2014.
2. The CTP shall determine the total sum of the results of the calculations under paragraph 1 for all data contributors included in the list defined under Article 1(b).
3. The total summed value per data contributor as set out in paragraph 1 shall be divided by the total sum of those summed values as set out in paragraph 2. The resulting percentages for each data contributor shall be multiplied by the total monetary amount of revenues to be redistributed.

Article 6

Relevant assessment periods

(Article 27h(8)(b) of Regulation (EU) No 600/2014)

1. The CTP shall perform the calculations set out in Articles 1(b) to 5 by the end of January of each calendar year using the trades recorded by each data contributor over the period 1 January and 31 December of the previous calendar year. The CTP shall apply the resulting percentages of those calculations by 1 February of each calendar year.

Article 7

Criteria for temporary suspension of the revenue redistribution scheme

(Article 27h(8)(c) of Regulation (EU) No 600/2014)

1. Where the CTP finds that a data contributor has seriously and repeatedly breached the data requirements referred to in Articles 22a, 22b and 22c of Regulation (EU) 600/2014, the CTP may decide to temporarily suspend the participation of that data contributor in the revenue redistribution scheme.
2. When deciding whether to suspend the participation of the data contributor in the revenue redistribution scheme as referred to in paragraph 1, the CTP shall, in particular, take into account the following criteria:

(a) for three consecutive days, the data contributor has failed to submit transactions or has submitted more than 3 transactions later than as close to real time as technically possible, as defined in the [regulatory technical standards adopted pursuant to Article 22b(3) of Regulation (EU) No 600/2014] and, those reports account for at least a number of transactions that in a percentage is not lower than the 10% of the total number of transaction submitted in a single day;

(b) for three consecutive days, the data contributor has submitted more than 3 transactions and those reports account for at least a number of transaction that in percentage is not lower than the 10% of the total number of transactions submitted in a single day, that are incomplete or contain potentially erroneous data, as defined in the [regulatory technical standards adopted pursuant to Article 22b(3) of Regulation (EU) No 600/2014];

(c) all conditions that are out of the ordinary, unavoidable or unexpected, and that cause what would have been otherwise identified as a serious and repeated breach by the data contributor of the data requirements referred to in Articles 22a, 22b and 22c of Regulation (EU) No 600/2014;

(a) the data contributor does no longer meet the minimum quality of the transmission protocols, in accordance with the regulatory technical standards adopted pursuant to Article 22b(3) of Regulation (EU) No 600/2014;

(d) the data contributor does no longer meet the minimum the level of accuracy to which business clocks are to be synchronised, in accordance with the requirements specified in the regulatory technical standards adopted pursuant to Article 22b(3) of Regulation (EU) No 600/2014.

Article 8

Minimum requirements on fair procedure for the revenue redistribution scheme

(Article 27h(8)(c) of Regulation (EU) No 600/2014)

1. The CTP shall inform the data contributor of the suspension of its participation in the revenue distribution scheme as soon as practically possible and, in any case, not later than within two business days from the time when the CTP has identified the serious and repeated breach. The CTP shall specify the data requirements deemed in breach and the number of days in relation to which revenue redistribution will be suspended and provide information to the data contributor supporting its assessment.

2. A data contributor may request within one week from the notification of the suspension that the CTP reviews the notification based on additional information proving that the data requirements were not breached, or that exceptional circumstances justify the breach of data requirements occurred.

3. The CTP shall review the suspension based on the information provided by the data contributor and shall inform the data contributor of its final decision on the suspension as soon as practically possible and, in any case, not later than within one week from when the information is provided by the data contributor. The CTP shall specify the data requirements deemed in breach and the number of days in relation to which revenue redistribution may be suspended and provide justification for its final assessment.

Article 9

Conditions for the resumption of revenue redistribution and for provision of revenue retained plus interest

(Article 27h(8)(c) of Regulation (EU) No 600/2014)

1. Where the grounds for the suspension referred to in Article 7 no longer apply, at the end of the suspension period, the CTP shall resume distribution of revenues to the data contributor.
2. Where, on the basis of the additional information provided by the data contributor in accordance with paragraph 3 of Article 8, the CTP finds that the data requirements have not been breached, it shall redistribute the revenue retained, with interest, for the corresponding period no later than the next revenue distribution window following the communication of the CTP final assessment to the data contributor.
3. For the purpose of the calculation of the interest referred to in paragraph 2, the CTP shall take into account the average rate of the ECB's deposit facility over the period of the suspension of the revenue distribution scheme.

Article 10

Entry into force and application

1. This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union. It shall apply from [DD MM 2025].
2. This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, [DD MM 2024]

For the Commission

The President

8.3.3 Draft RTS on the synchronisation of business clocks

COMMISSION DELEGATED REGULATION (EU) XXXX/XXX

of XXX

supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards for specifying the level of accuracy to which business clocks are to be synchronised and repealing Delegated Regulation (EU) 2017/574

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Regulation (EU) No 648/2012, and Article 22c thereof,

Whereas:

(1) Clock synchronisation has a direct impact in many areas. In the area of market integrity, competent authorities need to be able to reconstruct all events relating to an order throughout the lifetime of each order in an accurate time sequence. Competent authorities need to be able to reconstruct these events over multiple trading venues on a consolidated level to be able to conduct effective cross-venue monitoring on market abuse. It is therefore necessary to establish a common reference time and rules on maximum divergence from the common reference time to ensure that all operators of trading venues and their members or participants are recording the date and time based on the same time source and in accordance with consistent standards. It is also necessary to provide for accurate time stamping to allow competent authorities to distinguish between different reportable events which may otherwise appear to have taken place at the same time.

(2) In the context of the consolidation of data, clock synchronisation enables a meaningful comparison of the timestamps reported by different entities, such that pre- and post-trade transparency data can be part of a reliable consolidated tape. It is also essential for conducting cross-venue monitoring of orders and detecting instances of market abuse and allows for a clearer comparison between the transaction and the market conditions prevailing at the time of their execution.

(3) However, the achievement of these objectives does not require all entities to synchronise their clocks to the same level of accuracy. It is thus necessary to calibrate the expected level of accuracy to the type of activities that each entity performs, and to the latency levels of the systems that they operate, so to avoid the imposition of unnecessary operational costs to the entities subject to this requirement.

(4) As it concerns operators of trading venues and systematic internalisers, the number of orders that they receive every second can be very high, much higher than that of executed transactions. Especially when using high-frequency trading techniques, this may extend to several thousands of orders per second depending on the trading venue or systematic internaliser, the type of members, participants or users and clients, and the financial instruments' volatility and liquidity. As a result, it is necessary to establish minimum granularity requirements for recording the date and time of reportable events by operators of trading venues and systematic internalisers that are proportionate to the speed at which they process and acknowledge orders.

(5) Members, participants or users of trading venues operate systems that tend to match the nature and complexity of the trading activity that they perform on a given trading venue. Consequently, the applicable accuracy levels should be commensurate to the type of trading activity.

(6) There are, however, trading models for which increased accuracy might not be relevant or feasible. Voice trading systems or request for quote systems where the response requires human intervention or does not allow algorithmic trading, or systems which are used for concluding negotiated transactions should be subject to different accuracy standards. Trading venues operating those trading systems are not typically susceptible to the high volume of events that can happen within the same second, meaning that it is not necessary to impose a finer granularity to time stamping of those events since it is less likely that there would be multiple events occurring at the same time. In addition, trades on those trading venues may be agreed using manual methods which can take time to agree. In those trading venues there is also an inherent delay between the moment when the trade is executed and the moment when the trade is recorded in the trading system, meaning that applying more stringent accuracy requirements would not necessarily lead to more meaningful and accurate record keeping by the operator of the trading venue, its members or participants.

(7) As regards approved publication arrangements, designated publishing entities and consolidated tape providers, it should be noted that these entities operate systems for the purposes of data reporting, publication, consolidation and dissemination, and thus they feature a weaker link to the type of trading activity that originated the order and transaction data they process. They should thus be subject to absolute accuracy requirements.

(8) Competent authorities need to understand how trading venues and their members or participants are ensuring their traceability to Coordinated Universal Time (UTC). This is because of the complexity of the different systems and the number of alternative methods that

can be used to synchronise to UTC. Given that clock drift can be affected by many different elements, it is also appropriate to determine an acceptance level for the maximum divergence from UTC.

(9) Commission Delegated Regulation (EU) No 2017/574 of 7 June 2016 supplementing Directive (EU) No 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards for the level of accuracy of business clocks was adopted on the basis of Article 50 of MiFID II. Since that Article was deleted, the clock synchronisation requirements are now established in Article 22c of MiFIR,

(10) This Regulation is based on the draft regulatory technical standards submitted to the Commission by the European Securities and Markets Authority.

(11) The European Securities and Markets Authority has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the advice of the Securities and Markets Stakeholder Group established in accordance with Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council,

HAS ADOPTED THIS REGULATION:

Article 1

Reference time

Operators of trading venues and their members, participants or users, systematic internalisers, designated publishing entities, APAs and CTPs shall synchronise the business clocks they use to record the date and time of any reportable event with the Coordinated Universal Time (UTC) issued and maintained by the timing centres listed in the database maintained by the Bureau international des poids et mesures. Operators of trading venues and their members, participants or users, systematic internalisers, designated publishing entities, APAs and CTPs may also synchronise the business clocks they use to record the date and time of any reportable event with UTC disseminated by a satellite system, provided that any offset from UTC is accounted for and removed from the timestamp.

Article 2

Level of accuracy for operators of trading venues and systematic internalisers

1. Operators of trading venues and systematic internalisers shall ensure that their business clocks adhere to the levels of accuracy specified in Table 1 of the Annex according to the gateway-to-gateway latency of each of their trading systems.

Gateway to gateway latency shall be the time measured from the moment a message is received by an outer gateway of the trading venue's system, sent through the order submission

protocol, processed by the matching engine, and then sent back until an acknowledgement is sent from the gateway.

2. By derogation from paragraph 1, operators of trading venues and systematic internalisers that operate a voice trading system, request for quote system where the response requires human intervention or does not allow algorithmic trading, or a system that formalises negotiated transactions in accordance with Article 4(1)(b) of Regulation (EU) No 600/2014 of the European Parliament and of the Council (2) shall ensure that their business clocks do not diverge by more than one second from UTC referred to in Article 1 of this Regulation. The operator of the trading venue or systematic internaliser shall ensure that times are recorded to at least a one second granularity.

3. Operators of trading venues and systematic internalisers that operate multiple types of trading systems shall ensure that each system adheres to the level of accuracy applicable to that system in accordance with paragraphs 1 and 2.

Article 3

Level of accuracy for members, participants or users of a trading venue

1. Members, participants or users of trading venues shall ensure that their business clocks used to record the time of reportable events adhere to the level of accuracy specified in Table 2 of the Annex.

2. Members, participants or users of trading venues that engage in multiple types of trading activities shall ensure that the systems that they use to record reportable events adhere to the level of accuracy applicable to each of these trading activities in accordance with the requirements set out in Table 2 of the Annex.

Article 4

Level of accuracy for designated publishing entities

1. Designated publishing entities shall record the date and time of reportable events up to one millisecond or better.

2. Designated publishing entities shall ensure that their business clocks used to record the time of reportable events do not diverge by more than one millisecond from the reference time defined in Article 1.

3. By derogation from paragraphs 1 and 2, designated publishing entities that have also acquired the status of systematic internaliser shall comply with Article 2.

Article 5

Level of accuracy for consolidated tape providers

1. Consolidated tape providers shall record the date and time of reportable events up to one millisecond or better.
2. Consolidated tape providers shall ensure that their business clocks used to record the time of reportable events do not diverge by more than one millisecond from the reference time defined in Article 1.

Article 6

Level of accuracy for approved publication arrangements

1. Approved publication arrangements shall record the date and time of reportable events up to one millisecond or better.
2. Approved publication arrangements shall ensure that their business clocks used to record the time of reportable events do not diverge by more than one millisecond from the reference time defined in Article 1.

Article 7

Compliance with the maximum divergence requirements

Operators of trading venues and their members or participants shall establish a system of traceability to UTC. They shall be able to demonstrate traceability to UTC by documenting the system design, functioning and specifications. They shall be able to identify the exact point at which a timestamp is applied and demonstrate that the point within the system where the timestamp is applied remains consistent. They shall conduct a review of the compliance of the traceability system with this Regulation at least once a year.

Article 8

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

It shall apply on that same date.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Commission

The President

ANNEX

Table 1

Level of accuracy for operators of trading venues and systematic internalisers

Gateway-to-gateway latency time of the trading system	Maximum divergence from UTC	Granularity of the timestamp
> 1 millisecond	1 millisecond	1 millisecond or better
≤ 1 millisecond	100 microseconds	<p><i>Option 1: maintain the granularity level set in RTS 25 of 1 microsecond or better)</i></p> <p><i>Option 2: increase granularity to 0.1 microsecond or better</i></p>

Table 2

Level of accuracy for members, participants or users of a trading venue

Type of trading activity	Description	Maximum divergence from UTC	Granularity of the timestamp
Activity using high frequency algorithmic trading technique	High frequency algorithmic trading technique.	100 microseconds	1 microsecond or better
Activity on voice trading systems	Voice trading systems as defined in Article 5(5) of Commission Delegated Regulation (EU) 2017/583 (1)	1 second	1 second or better
Activity on request for quote systems where the response requires human intervention or where the system does not allow algorithmic trading	Request for quotes systems as defined in Article 5(4) of Delegated Regulation (EU) 2017/583	1 second	1 second or better

Activity of concluding negotiated transactions	Negotiated transaction as set out in Article 4(1)(b) of Regulation (EU) No 600/2014.	1 second	1 second or better
Any other trading activity	All other trading activity not covered by this table.	1 millisecond	1 millisecond or better

(1) Commission Delegated Regulation (EU) 2017/583 of 14 July 2016 supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments with regard to regulatory technical standards on transparency requirements for trading venues and investment firms in respect of bonds, structured finance products, emission allowances and derivatives (OJ L 87, 31.3.2017, p. 229).

8.3.4 Draft RTS on the authorisation of APAs and ARMs

COMMISSION DELEGATED REGULATION (EU) 20XX/XXX

of XX XXXX 202X

supplementing Regulation 20XX/XX/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements for approved publication arrangements and approved reporting mechanisms

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 600/2014 of 15 May 2014 of the European Parliament and of the Council on markets in financial instruments and amending Regulation 2024/791 and in particular Article 27d(5), Article 27(g) and Article 27(i) thereof,

Whereas:

(1) In accordance with Regulation (EU) No 600/2014, data reporting services providers cover three different types of entities: approved reporting mechanisms (ARMs), approved publication arrangements (APAs) and consolidated tape providers (CTPs). The authorisation of CTP is covered in Commission delegated regulation XXX/XXXX.

(2) An applicant seeking authorisation as an APA or ARM should provide in its application for authorisation a programme of operations and an organisational chart. The organisational chart should identify who is responsible for the different activities to enable ESMA or the national competent authority to assess whether the data reporting services provider has sufficient human resources and oversight over its business. The organisational chart should not only cover the scope of the data reporting services but should also include any other services that the entity provides as this may highlight areas which may affect the independence of the data reporting services provider and give rise to a conflict of interest. An applicant seeking authorisation as an APA or ARM should also provide information on the composition, functioning and independence of its governing bodies in order for competent authorities to be able to assess whether the policies, procedures and corporate governance structure ensure the independence of the APA or ARM and the avoidance of conflicts of interest.

(3) Conflicts of interest can arise between APAs or ARMs, clients using their services to meet their regulatory obligations and other entities purchasing data from data reporting

services providers. In particular, those conflicts may arise where the data reporting services provider is engaged in other activities such as acting as a market operator, investment firm or trade repository. If conflicts are left unaddressed, this could lead to a situation where the data reporting services provider has an incentive to delay publication or submission of data or to trade on the basis of the confidential information it has received. The data reporting services provider should therefore adopt a comprehensive approach to identifying, preventing and managing existing and potential conflicts of interest, including preparing an inventory of conflicts of interest and implementing appropriate policies and procedures to manage those conflicts and, where necessary, separate business functions and personnel to limit the flow of sensitive information between different business areas of the data reporting services provider.

(4) All members of the management body of an APA or ARM should be persons who are of sufficiently good repute and possess sufficient knowledge, skills and experience, as those persons play a key role in ensuring that the data reporting services provider meets its regulatory obligations and contribute to the business strategy of the data reporting services provider. It is therefore important for the data reporting services provider to demonstrate that it has a robust process for appointing and evaluating the performance of members of the management body and that clear reporting lines and regular reporting to the management body are in place.

(5) APAs and ARMs fall under the scope of Regulation (EU) 2022/2554 (Digital Operational Resilience Act or DORA) and are therefore subject to the digital operational resilience requirements included therein. Therefore, APAs and ARMs shall comply with all obligations under DORA applicable to APAs and ARMs. They shall demonstrate compliance in the areas of ICT risk-management, outsourcing, business continuity and back-up facilities, testing and capacity, security and incident reporting to ESMA or the national competent authority. It is therefore important that applicants are able to demonstrate during the authorisation phase their ability to comply with the requirements in DORA as soon as they start operating as an APA or an ARM.

(6) An investment firm which has transaction reporting obligations, known as a 'reporting firm', may choose to use a third party to submit transaction reports on its behalf to an ARM, that is a 'submitting firm'. By virtue of its role the submitting firm will have access to the confidential information that it is submitting. However, the submitting firm should not be entitled to access any other data about the reporting firm or the reporting firm's transactions which are held at the ARM. Such data may relate to transaction reports which the reporting firm has submitted itself to the ARM or which it has sent to another submitting firm to send to the ARM. This data should not be accessible to the submitting firm as it may contain confidential information such as the identity of the reporting firm's clients.

(7) An APA or ARM should monitor that the data it is publishing or submitting is accurate and complete and should ensure that it has mechanisms for detecting errors or omissions caused by the client or itself. In the case of an ARM, this can include reconciliations of a sample population of data submitted to the ARM by an investment firm or generated by the ARM on

the investment firm's behalf with the corresponding data provided by the competent authority. The frequency and extent of such reconciliations should be proportionate to the volume of data handled by the ARM and the extent to which it is generating transaction reports from clients' data or passing on transaction reports completed by clients. In order to ensure timely reporting that is free of errors and omissions an ARM should continuously monitor the performance of its systems.

(8) Where an ARM itself causes an error or omission, it should correct this information without delay as well as notify ESMA or the competent authority of its home Member State and any competent authority to which it submits reports of the error or omission as those competent authorities have an interest in the quality of the data being submitted to them. The ARM should also notify its client of the error or omission and provide updated information to the client so that the client's internal records may be aligned with the information which the ARM has submitted to the competent authority on the client's behalf.

(9) APAs should be able to delete and amend the information which they receive from an entity providing them with information to deal with situations where, in exceptional circumstances, the reporting entity is experiencing technical difficulties and cannot delete or amend the information itself. However, APAs should not otherwise be responsible for correcting information contained in published reports where the error or omission was attributable to the entity providing the information. This is due to the fact that APAs cannot know with certainty whether a perceived error or omission is indeed incorrect since they were not party to the executed trade.

(10) To facilitate reliable communication between an APA and the investment firm reporting a trade, particularly in relation to cancellations and amendments of specific transactions, an APA should include in the confirmation messages to reporting investment firms the transaction identification code that has been assigned by the APA when making the information public.

(11) To comply with its reporting obligation under Regulation (EU) No 600/2014 an ARM should ensure the smooth flow of information to and from a competent authority, including the ability to transfer reports and deal with rejected reports. The ARM should therefore be able to demonstrate that it can comply with the technical specifications set out by the competent authority regarding the interface between the ARM and the competent authority.

(12) An APA or ARM should also ensure that it stores the transaction and trade reporting information which it handles for a sufficiently long period of time in order to facilitate the retrieval of historical information by competent authorities.

(13) In order to ensure efficient dissemination of information made public by APAs and an easy access and use of such information by market participants, the information should be published in a machine-readable format through robust channels allowing for automatic access to the data. While websites may not always offer an architecture that is robust and scalable enough and that allows for easy automatic access to data, these technological constraints may

be overcome in the future. A particular technology should therefore not be prescribed, but criteria should be set out that need to be met by the technology which is to be used.

(14) The provisions in this Regulation are closely linked, since they deal with the authorisation and organisational requirements for APAs and ARMs. To ensure coherence between those provisions, which should enter into force at the same time, and to facilitate a comprehensive view by stakeholders and, in particular those subject to the obligations, it is necessary to include these regulatory technical standards in a single Regulation.

(15) This Regulation is based on the draft regulatory technical standards submitted by ESMA to the Commission.

(16) ESMA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the opinion of the Securities and Markets Stakeholder Group established by Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council

HAS ADOPTED THIS REGULATION:

CHAPTER I

AUTHORISATION

(Article 27d(1) of Regulation (EU) No 600/2014)

Article 1

Information to competent authorities

1. An applicant APA or ARM seeking authorisation shall submit to ESMA or, where applicable, the national competent authority, the information set out in Chapter I and the information regarding all the organisational requirements set out in Chapter II.
2. An APA or ARM shall promptly inform ESMA or, where applicable, the competent authority of its own Member State, of any material change to the information provided at the time of the authorisation and thereafter.

Article 2

Information on the organisation

1. An applicant APA or ARM seeking authorisation shall include in its application for authorisation a programme of operations referred to in Article 27d(1) of Regulation (EU) 600/2014. The programme of operations shall include the following information:
 - a. information on the organisational structure of the applicant, including an organisational chart and a description of the human, technical, and legal resources allocated to its business activities;
 - b. information on the operational separation policies and procedures to ensure segregation between the APA or ARM and any other activity performed by the firm;
 - c. information on the compliance policies and procedures of the APA or ARM, including:
 - i. the name of the person or persons responsible for the approval and maintenance of those policies;
 - ii. the arrangements to monitor and enforce the compliance policies and procedures;
 - iii. the measures to be undertaken in the event of a breach which may result in a failure to meet the conditions for initial authorisation;
 - iv. a description of the procedure for reporting to ESMA or the national competent authority any breach which may result in a failure to meet the conditions for initial authorisation;
 - d. a list of all outsourced functions and resources allocated to the control of the outsourced functions.
2. An APA or ARM offering services other than data reporting services shall describe those services in the organisational chart.

Article 3

Information on the ownership

1. An applicant APA or ARM seeking authorisation shall include in its application for authorisation:

- a. a list containing the name of each person or entity who directly or indirectly holds 5 % or more of the applicant's capital or of its voting rights or whose holding makes it possible to exercise a significant influence over the applicant's management;
 - b. a list of any undertakings in which a person referred to in point (a) holds 5 % or more of the capital or voting rights or over whose management they exercise a significant influence.
2. An applicant APA or ARM seeking authorisation shall include in its application for authorisation a chart showing the ownership links between the parent undertaking, subsidiaries and any other associated entities or branches.
 3. The undertakings shown in the chart referred to in paragraph 2 shall be identified by their full name, legal status and legal address.

Article 4

Corporate governance

1. An APA or ARM applicant seeking authorisation shall include in its application for authorisation information on the internal corporate governance policies and the procedures which govern its management body, senior management, and, where established, committees.
2. The information set out in paragraph 1 shall include:
 - a. a description of the processes for selection, appointment, performance evaluation and removal of senior management and members of the management body;
 - b. a description of the reporting lines and the frequency of reporting to the senior management and the management body;
 - c. a description of the policies and procedures on access to documents by members of the management body.

Article 5

Information on the members of the management body

1. An applicant APA or ARM seeking authorisation shall include in its application for authorisation the following information in respect of each member of the management body:

- a. name, date and place of birth, personal national identification number or an equivalent thereof, address and contact details;
- b. the position for which the person is or will be appointed;
- c. a curriculum vitae evidencing sufficient experience and knowledge to adequately perform the responsibilities;
- d. criminal records, notably through an official certificate, or, where such a document is not available in the relevant Member State, a self-declaration of good repute and the authorisation to the competent authority to inquire whether the member has been convicted of any criminal offence in connection with the provision of financial or data services or in relation to acts of fraud or embezzlement;
- e. a self-declaration of good repute and the authorisation to the competent authority to inquire whether the member:
 - i. has been subject to an adverse decision in any proceedings of a disciplinary nature brought by a regulatory authority or government body or is the subject of any such proceedings which are not concluded;
 - ii. has been subject to an adverse judicial finding in civil proceedings before a court in connection with the provision of financial or data services, or for misconduct or fraud in the management of a business;
 - iii. has been part of the management body of an undertaking which was subject to an adverse decision or penalty by a regulatory authority or whose registration or authorisation was withdrawn by a regulatory authority;
 - iv. has been refused the right to carry on activities which require registration or authorisation by a regulatory authority;
 - v. has been part of the management body of an undertaking which has gone into insolvency or liquidation while the person held such position or within a year after which the person ceased to hold such position;
 - vi. has been otherwise fined, suspended, disqualified, or been subject to any other sanction in relation to fraud, embezzlement or in connection with the provision of financial or data services, by a professional body;

- vii. has been disqualified from acting as a director, disqualified from acting in any managerial capacity, dismissed from employment or other appointment in an undertaking as a consequence of misconduct or malpractice;
- f. an indication of the minimum time that is to be devoted to the performance of the person's functions within the data reporting services provider;
- g. a declaration of any potential conflicts of interest that may exist or arise in performing the duties and how those conflicts are managed.

Article 6

Internal controls

1. An applicant APA or ARM seeking authorisation shall include in its application for authorisation detailed information regarding its control environment. This shall include information regarding its compliance function, risk assessment, internal control mechanisms and the arrangements of its internal audit function.
2. The detailed information referred to in paragraph 1 shall contain:
 - a. an outline of the applicant's control environment, including where it relies on outsourced functions;
 - b. an assessment of its key risks that may arise in the running the APA or ARM;
 - c. the applicant's internal control policies and procedures to ensure the consistent and effective implementation of those policies;
 - d. any policies, procedures and manuals for monitoring and evaluating the adequacy and effectiveness of the applicant's systems;
 - e. any policies, procedures and manuals for controlling and safeguarding the applicant's information processing systems;
 - f. the identity of the internal bodies in charge of evaluating any internal control findings.
3. An application for authorisation as an APA or ARMA shall contain the following information with respect to the applicant's internal audit function:
 - a. Information on its adherence to national or international professional standards;

- b. In case there is an Internal Audit Committee, its composition, competences and responsibilities;
- c. its internal audit function charter, methodologies, standards and procedures;
- d. an explanation of how its internal audit methodology is developed and applied taking into account the nature of the applicant's activities, complexities and risks;
- e. a work plan for the Internal Audit Committee for the three years following the date of application, focusing on the nature and extent of the applicant's activities, complexities and risks.

Article 7

Digital Operational Resilience

1. Without prejudice to the obligations set in Regulation (EU) 2022/2554, an applicant APA or ARM seeking authorisation shall include in its application for authorisation evidence of compliance with the requirements on ICT risk-management organisation and capabilities, operational resilience strategy and testing, incident management and ICT third-party risk monitoring.
2. When addressing ICT risk, an APA or ARM shall take into account the size and overall risk profile, and the nature, scale and complexity of its services, activities and operations.
3. The information set out in paragraph 1 shall include policies and procedures regarding the applicant's arrangements on:
 - a. ICT risk-management;
 - b. ICT-related incident management;
 - c. Digital operational resilience testing;
 - d. ICT third-party risk monitoring.

CHAPTER II

ORGANISATIONAL REQUIREMENTS

(Article 27g(1), (3), (4) and (5), Article 27i(2), (3) and (4) of Regulation (EU) 600/2014)

Article 8

Conflicts of interest

1. An APA or ARM shall operate and maintain effective administrative arrangements, designed to prevent conflicts of interest with clients using its services to meet their regulatory obligations and other entities purchasing data from data reporting services providers. Such arrangements shall include policies and procedures for identifying, managing and disclosing existing and potential conflicts of interest and shall contain:
 - a. an inventory of existing and potential conflicts of interest, setting out their description, identification, prevention, management and disclosure;
 - b. the separation of duties and business functions within the data reporting services provider including:
 - i. measures to prevent or control the exchange of information where a risk of conflicts of interest may arise;
 - ii. the separate supervision of relevant persons whose main functions involve interests that are potentially in conflict with those of a client;
 - c. a description of the fee policy for determining fees charged by the data reporting services provider and undertakings to which the data reporting services provider has close links;
 - d. a description of the remuneration policy for the members of the management body and senior management;
 - e. the rules regarding the acceptance of money, gifts or favours by staff of the data reporting services provider and its management body.
2. The inventory of conflicts of interest as referred to in paragraph 1(a) shall include conflicts of interest arising from situations where the APA or ARM:
 - a. may realize a financial gain or avoid a financial loss, to the detriment of a client;

- b. may have an interest in the outcome of a service provided to a client, which is distinct from the client's interest in that outcome;
- c. may have an incentive to prioritize its own interests or the interest of another client or group of clients rather than the interests of a client to whom the service is provided;
- d. receive or may receive from any person other than a client, in relation to the service provided to a client, an incentive in the form of money, goods or services, other than commission or fees received for the service.

Article 9

Organisational requirements regarding outsourcing

1. Without prejudice to the obligations set in Regulation (EU) 2022/2554 on management of ICT third-party risk, where an APA or ARM arranges for activities to be performed on its behalf by third parties, including undertakings with which it has close links, it shall ensure that the third-party service provider has the ability and the capacity to perform the activities reliably and professionally.
2. An APA or ARM shall specify which of the activities are to be outsourced, including a specification of the level of human and technical resources needed to carry out each of those activities.
3. An APA or ARM that outsources activities shall ensure that the outsourcing does not reduce its ability or power to perform senior management or management body functions.
4. An APA or ARM shall remain responsible for any outsourced activity and shall adopt organisational measures to ensure:
 - a. that it assesses whether the third-party service provider is carrying out outsourced activities effectively and in compliance with applicable laws and regulatory requirements and adequately addresses identified failures;
 - b. the identification of the risks in relation to outsourced activities and adequate periodic monitoring;
 - c. adequate control procedures with respect to outsourced activities, including effectively supervising the activities and their risks within the data reporting services provider;
 - d. adequate business continuity of outsourced activities;

5. For the purposes of point (d), the data reporting services provider shall obtain information on the business continuity arrangements of the third-party service provider, assess its quality and, where needed, request improvements.
6. An APA or ARM shall ensure that the third-party service provider cooperates with ESMA or, where applicable, the national competent authority of the data reporting services provider in connection with outsourced activities.
7. Where an APA or ARM outsources a critical function as defined in Article 3, point (22) of Regulation (EU) 2022/2554, it shall provide ESMA or, where applicable, the competent authority of its home Member State with:
 - a. the identification of the third-party service provider;
 - b. the organisational measures and policies with respect to outsourcing and the risks posed by it as specified in paragraph 4;
 - c. internal or external reports on the outsourced activities.

Article 10

Management of incomplete or potentially erroneous information by APAs

1. APAs shall set up and maintain appropriate arrangements to ensure that they accurately publish the trade reports received from investment firms without themselves introducing any errors or omitting information and shall correct information where they have themselves caused the error or omission.
2. APAs shall continuously monitor in real-time the performance of their IT systems ensuring that the trade reports they have received have been successfully published.
3. APAs shall perform periodic reconciliations between the trade reports they receive and the trade reports that they publish, verifying the correct publication of the information.
4. An APA shall confirm the receipt of a trade report to the reporting investment firm, including the transaction identification code assigned by the APA. An APA shall refer to the transaction identification code in any subsequent communication with the reporting firm in relation to a specific trade report.
5. An APA shall set up and maintain appropriate arrangements to identify on receipt trade reports that are incomplete or contain information that is likely to be

erroneous. These arrangements shall include automated price and volume alerts, taking into account:

- a. the sector and the segment in which the financial instrument is traded;
 - b. liquidity levels, including historical trading levels;
 - c. appropriate price and volume benchmarks;
 - d. if needed, other parameters according to the characteristics of the financial instrument.
6. Where an APA determines that a trade report it receives is incomplete or contains information that is likely to be erroneous, it shall not publish that trade report and shall promptly alert the investment firm submitting the trade report.
 7. In exceptional circumstances APAs shall delete and amend information in a trade report upon request from the entity providing the information when that entity cannot delete or amend its own information for technical reasons.
 8. APAs shall publish non-discretionary policies on information cancellation and amendments in trade reports which set out the penalties that APAs may impose on investment firms providing trade reports where the incomplete or erroneous information has led to the cancellation or amendment of trade reports.

Article 11

Management of incomplete or potentially erroneous information by ARMs

1. An ARM shall set up and maintain appropriate arrangements to identify transaction reports that are incomplete or contain obvious errors caused by clients. An ARM shall perform validation of the transaction reports against the requirements established under Article 26 of Regulation (EU) No 600/2014 for field, format and content of fields in accordance with Table 1 of Annex I to Commission Delegated Regulation (EU) 2017/590.
2. An ARM shall set up and maintain appropriate arrangements to identify transaction reports which contain errors or omissions caused by that ARM itself and to correct, including deleting or amending, such errors or omissions. An ARM shall perform validation for field, format and content of fields in accordance with Table 2 of Annex I to Delegated Regulation (EU) 2017/590.
3. An ARM shall continuously monitor in real-time the performance of its systems ensuring that a transaction report it has received has been successfully reported to

the competent authority in accordance with Article 26 of Regulation (EU) No 600/2014.

4. An ARM shall perform periodic reconciliations at the request of ESMA or, where applicable, the competent authority or the competent authority to whom the ARM submits transaction reports between the information that the ARM receives from its client or generates on the client's behalf for transaction reporting purposes and data samples of the information provided by the competent authority.
5. Any corrections, including cancellations or amendments of transaction reports, that are not correcting errors or omissions caused by an ARM, shall only be made at the request of a client and per transaction report. Where an ARM cancels or amends a transaction report at the request of a client, it shall provide this updated transaction report to the client.
6. Where an ARM, before submitting the transaction report, identifies an error or omission caused by a client, it shall not submit that transaction report and shall promptly notify the investment firm of the details of the error or omission to enable the client to submit a corrected set of information.
7. Where an ARM becomes aware of errors or omissions caused by the ARM itself, it shall promptly submit a correct and complete report.
8. An ARM shall promptly notify the client of the details of the error or omission and provide an updated transaction report to the client. An ARM shall also promptly notify ESMA or, where applicable, the competent authority and the competent authority to whom the ARM reported the transaction report about the error or omission.
9. The requirement to correct or cancel erroneous transaction reports or report omitted transactions shall not extend to errors or omissions which occurred more than five years before the date that the ARM became aware of such errors or omissions.

Article 12

Connectivity of ARMs

1. An ARM shall have in place policies, arrangements and technical capabilities to comply with the technical specification for the submission of transaction reports required by ESMA the competent authority of its home Member State and by other competent authorities to whom the ARM sends transaction reports.
2. An ARM shall have in place adequate policies, arrangements and technical capabilities to receive transaction reports from clients and to transmit information

back to clients. The ARM shall provide the client with a copy of the transaction report which the ARM submitted to the competent authority on the client's behalf.

Article 13

Machine readability

1. APAs shall publish the information which has to be made public in accordance with Article 27g(1) of Regulation (EU) No 600/2014 in a machine readable way.
2. Information shall only be considered published in a machine-readable way where all of the following conditions are met:
 - a. it is in an electronic format designed to be directly and automatically read by a computer;
 - b. it is stored in an appropriate IT architecture that enables automatic access;
 - c. it is robust enough to ensure continuity and regularity in the performance of the services provided and ensures adequate access in terms of speed;
 - d. it can be accessed, read, used and copied by computer software that is free of charge and publicly available.
3. For the purposes of point (a) of the first subparagraph, the electronic format shall be specified by free, non-proprietary and open standards.
4. For the purposes of paragraph 2(a), electronic format shall include the type of files or messages, the rules to identify them, and the name and data type of the fields they contain.
5. APAs shall:
 - a. make instructions available to the public, explaining how and where to easily access and use the data, including identification of the electronic format;
 - b. make public any changes to the instructions referred to in point (a) at least three months before they come into effect, unless there is an urgent and duly justified need for changes in instructions to take effect more quickly;
 - c. include a link to the instructions referred to in point (a) on the homepage of their website.

Article 14

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

It shall apply from [xxxx].

This Regulation shall be binding in its entirety and directly applicable in all Member States.

8.3.5 Draft ITS on the authorisation of APAs and ARMs

COMMISSION DELEGATED REGULATION (EU) 20XX/XXX

of XX XXXX 202X

supplementing Regulation 20X4/XX/EU of the European Parliament and of the Council with regard to implementing technical standards on the authorisation, organisational requirements for authorised reporting mechanisms and authorised public arrangements

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 600/2014 of 15 May 2014 of the European Parliament and of the Council on markets in financial instruments and in particular Article 27d(2) thereof,

Whereas:

(1) It is appropriate to set out common standard forms, templates and procedures to ensure a common understanding and enforcement among ESMA and Member States' competent authorities of the authorisation process regarding the provision of data reporting services as well as to ensure efficient information flows. In order to facilitate communications between the applicant and the competent authority, competent authorities should designate a contact point and should publish the information on that contact point on their website.

(2) The organisational requirements for approved publication arrangements (APAs) and approved reporting mechanisms (ARMs) differ from each other in some respects. As a result, an applicant should only be required to include in its application the information needed for assessing the application for the data reporting service it intends to provide.

(3) In order to allow ESMA and competent authorities to assess whether changes to the management body of an APA or ARM may pose a threat to the effective, sound and prudent management of the data reporting services provider and to adequately take into consideration of the interests of its clients and the integrity of the market, it is appropriate to set out clear time limits for the submission of information on those changes.

- (4) APAs and ARMs should be able to submit information on a change to the management body after that change takes effect where the change is due to factors beyond the control of the data reporting services provider.
- (5) This Regulation is based on the draft implementing technical standards submitted by the European Securities and Markets Authority (ESMA) to the Commission.
- (6) ESMA has conducted open public consultations on the draft implementing technical standards on which this Regulation is based. ESMA has not analysed potential related costs and benefits as this would have been disproportionate in relation to their scope and impact.
- (7) ESMA has requested the opinion of the Securities and Markets Stakeholder Group established by Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council (2),

HAS ADOPTED THIS REGULATION:

Article 1

Designation of a contact point

Competent authorities shall designate a contact point for handling all information received from applicants seeking authorisation as an authorised reporting mechanisms or approved reporting mechanisms. The contact details of the designated contact point shall be made public and regularly updated on the competent authorities' websites.

Article 2

Provision of information and notification to the competent authority

1. An applicant for authorisation to provide data reporting services under the provisions of Title IV of Regulation (EU) No 600/2014 shall provide the competent authority with all information in accordance with Article 27d of Regulation (EU) No 600/2014 by filling in the application form set out in Annex I.
2. The applicant shall notify the competent authority with information of all members of its management body by filling in the notification form set out in Annex II.

3. The applicant shall clearly identify in its submission which specific requirement under the provisions of Title IV of Regulation (EU) No 600/2014 it refers to and in which document attached to its submission that information is provided.

4. The applicant shall indicate in its submission whether any specific requirement under the provisions of Title IV of Regulation (EU) No 600/2014 or Commission Delegated Regulation (EU) 20XX/XX⁴² is not applicable to the data reporting service that it is applying for.

5. Competent authorities shall indicate on their websites whether duly completed application forms, notifications and any related additional information are to be submitted on paper, electronically, or both.

Article 3

Receipt of application

Within 10 working days from the receipt of the application, the competent authority shall send on electronically an acknowledgement of receipt to the applicant, including the contact details of the contact point designated pursuant to Article 1.

Article 4

Requests for additional information

The competent authority may send an information request to the applicant indicating which additional information is needed in order to proceed with the assessment of the application.

Article 5

Notification of changes to the membership of the management body

1. An APA or ARM shall notify electronically the competent authority of any change to the membership of its management body before such change takes effect.

Where, for substantiated reasons, it is not possible to make the notification before that change takes effect, it shall be made within 10 working days after the change.

⁴²Commission Delegated Regulation (EU) 20XX/XX of XX XX XXXX supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 87, 31.3.2017, p. 126).

2. The APA or ARM shall provide the information on the change referred to in paragraph 1 by filling in the notification form set out in Annex III.

Article 6

Communication of the decision to grant or refuse the authorisation

The competent authority shall inform the electronically of its decision to grant or to refuse the authorisation.

Article 7

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels, XX XXXX 2024.

For the Commission

The President

ANNEX I

Application form for authorisation to provide data reporting services

Reference number:.....

Date:.....

From:

Name of the applicant:

Address:

Legal Entity Identifier (where applicable):

(Contact details of the designated contact person at the applicant)

Full name:

Telephone:

Email:

To:

ESMA

Address

(Contact details of the designated contact point at ESMA)

Address:

Telephone:

Email:

Dear [insert appropriate name]

In accordance with Article 2 of the Commission Implementing Regulation (EU) 20XX/XXXX⁴³ please find the authorisation application.

- Person at the applicant in charge of preparing the notification.

Full Name:

Status/position:

Telephone:

Email:

Date:

Signature:

- Nature of the application (tick the relevant box(es)):

Authorisation - Approved Publication Arrangement (APA)

⁴³ Commission Implementing Regulation (EU) 20XX/XXXX of XX XXXX 20XX laying down implementing technical standards with regard to standard forms, templates and procedures for the authorisation of data reporting services providers and related notifications pursuant to Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments (OJ L 162, 23.6.2017, p. 3).

- Authorisation - Approved Reporting Mechanism (ARM) Content

Content

Please insert the information referred to under Commission Delegated Regulation (EU) 20XX/XXX (⁴⁴). Please set out that information under the appropriate section or make reference to the relevant annexes containing the information.

Information on the organisation (Article 2 of Delegated Regulation (EU) 20XX/XXX)

.....
.....

Information on the ownership (Article 3 of Delegated Regulation (EU) 20XX/XXX)

.....
.....

Information on corporate governance (Article 4 of Delegated Regulation (EU) 20XX/XXX)

.....
.....

Information on the members of the management body (Article 5 of Delegated Regulation (EU) 20XX/XXX)

.....
.....

Information on internal controls (Article 6 of Delegated Regulation (EU) 20XX/XXX)

.....

⁴⁴ Commission Delegated Regulation (EU) 20XX/XXX of 2 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 87, 31.3.2017, p. 126).

Information on digital operational resilience (Article 7 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on conflicts of interest (Article 8 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on organisational requirements regarding outsourcing (Article 9 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on Management of incomplete or potentially erroneous information by APAs
(Article 10 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on Management of incomplete or potentially erroneous information by ARMss
(Article 11 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on connectivity of ARMs (Article 12 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on machine readability (Article 13 of Delegated Regulation (EU) 20XX/XXX)

.....

Notes:

ANNEX II

Application form for the list of members of the management body

Reference number:.....

Date:.....

From:

Name of the applicant:

Address:

Legal Entity Identifier (where applicable):

(Contact details of the designated contact person at the applicant)

Full Name:

Telephone:

Email:

To:

ESMA:

Address:

(Contact details of the designated contact point at ESMA)

Address:

Telephone:

Email:

Dear [insert appropriate name]

In accordance with Article 2 of Commission Implementing Regulation (EU) 20XX/XXXX⁽⁴⁵⁾ please find attached the notification relating to the members of the management body.

- Person at the applicant in charge of preparing the application:

Full Name:

Status/position:

Telephone:

Email:

Date:

Signature

- List of members of the management body:

Member 1

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

⁴⁵ Commission Implementing Regulation (EU) 2017/1110 of 22 June 2017 laying down implementing technical standards with regard to standard forms, templates and procedures for the authorisation of data reporting services providers and related notifications pursuant to Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments (OJ L 162, 23.6.2017, p. 3).

Private address:

Contact details (Telephone and email address)

Position.....

Curriculum vitae attached to application: Yes/No

Professional experience and other relevant experience.....

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to the competent authority to make enquiries under Article 5(d) of Commission Delegated Regulation (EU) 20XX/XXX ⁽⁴⁶⁾.....

Self-declaration of good repute and authorisation to the competent authority to make enquiries under Article 5(e) of Delegated Regulation (EU) 20XX/XXX.....

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment whether the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties pursuant to Article 27(f)(3) of Regulation (EU) No 600/2014 of the European Parliament and of the Council ⁽⁴⁷⁾.....

Effective date.....

[Please set out that information here or provide an explanation of how it will be provided, or make reference to the relevant annexes containing the information]

⁴⁶ Commission Delegated Regulation (EU) 20XX/XXX of 2 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 187, 31.3.2017, p. 126).

⁴⁷ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (OJ L 173, 12.6.2014, p. 349)

Member [N]

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

Private address:

Contact details (Telephone and email address)

Position.....

Curriculum vitae attached to application: Yes/No

Professional experience and other relevant experience.....

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to the competent authority to make enquiries under Article 5(d) of Commission Delegated Regulation (EU) 20XX/XXX

Self-declaration of good repute and authorisation to the competent authority to make enquiries under 5(e)Article of Delegated Regulation (EU) 20XX/XXX.....

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment whether the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties pursuant to Article 27f (3) of Regulation (EU) No 600/2014 of the European Parliament and of the Council.....

Effective date.....

ANNEX III

Application form for changes to the membership of the management body

Reference number:.....

Date:.....

From:

Name of the authorised reporting mechanisms and approved reporting mechanisms:

Address:

Legal Entity Identifier (where applicable):

(Contact details of the designated contact person at the authorised reporting mechanisms and approved reporting mechanisms)

Full name:

Telephone:

Email:

To:

ESMA:

Address:

(Contact details of the designated contact point at ESMA)

Address:

Telephone:

Email:

Dear [insert appropriate name]

In accordance with Article 4 of the Commission Implementing Regulation (EU) 20XX/XXXX⁽⁴⁸⁾ please find attached the notification on changes to the membership of the management body.

- Person at the data reporting services provider in charge of preparing the notification:

Full Name:

Status/position:

Telephone:

Email:

Date:

Signed:

- Information on member(s) leaving the management body

Member 1

Full name.....

Contact details (Telephone and email address)

Position.....

Effective date of departure from management body.....

Reasons for the departure from management body.....

Member [N]

Full name.....

Contact details (Telephone and email address)

⁴⁸ Commission Implementing Regulation (EU) 2017/1110 of 22 June 2017 laying down implementing technical standards with regard to standard forms, templates and procedures for the authorisation of data reporting services providers and related notifications pursuant to Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments (OJ L 162, 23.6.2017, p. 3).

Position.....

Effective date of departure from management body.....

Reasons for the departure from management body.....

- Information on new member(s) of the management body

Member 1

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

Private address:

Contact details (telephone and email address)

Position.....

Curriculum vitae attached to application: Yes/No

Professional experience and other relevant experience.....

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to the competent authority to make enquiries under Article 5(d) of Commission Delegated Regulation (EU) 20XX/XXX ⁽⁴⁹⁾

Self-declaration of good repute and authorisation to the competent authority to make enquiries under Article 5(e) of Delegated Regulation (EU) 20XX/XXX (8)

⁴⁹ Commission Delegated Regulation (EU) 2017/571 of 2 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 187, 31.3.2017, p. 126).

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment that the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties referred to in Article 27f(3) of Regulation (EU) No 600/2014 of the European Parliament and of the Council ⁽⁵⁰⁾

.....
.....
.....

Effective date.....

[Please set out that information here or provide an explanation of how it will be provided, or make reference to the relevant annexes containing the information]

Member [N]

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

Private address:

Position.....

Personal national identification number or equivalent thereof.....

⁵⁰ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (OJ L 173, 12.6.2014, p. 349).

Private address:

Position.....

Curriculum vitae attached to application: Yes/No

Professional experience and other relevant experience.....

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to the competent authority to make enquiries under Article 5(d) of Delegated Regulation (EU) 20XX/XXX...

Self-declaration of good repute and authorisation to the competent authority to make enquiries under Article 5(e) of Delegated Regulation (EU) 20XX/XXX.....

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment that the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties referred to in Article 27f (3) of Regulation (EU) No 600/2014.....

Effective date.....

[Please set out that information here or provide an explanation of how it will be provided, or make reference to the relevant annexes containing the information]

- Complete updated list of members of the management body:

Name	Position	Effective data

Name

Position

Effective date

8.3.6 Draft RTS on the authorisation of CTPs

COMMISSION DELEGATED REGULATION (EU) 20XX/XXX

of XX XXXX 202X

supplementing Regulation (EU) No 600/2014 of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation for consolidated tape providers

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EU) No 600/2014 of 15 May 2014 of the European Parliament and of the Council on markets in financial instruments and amending Regulation (EU) No 2024/791 and in particular Article 27da(2), Article 27db(7), Article 27h and Article 27f(2) thereof,

Whereas:

(1) In accordance with Regulation (EU) No 600/2014 data reporting services providers cover three different types of entities: approved reporting mechanisms (ARMs), approved publication arrangements (APAs) and consolidated tape providers (CTPs).

(2) The Regulation (EU) 2024/791 (MiFIR review) introduced Article 27da(2), which includes the selection criteria to determine whether an applicant can operate a CTP. Commission delegated regulation (EU) 20XX/XXX reflects these selection criteria to ensure that the applicant has put in place the arrangements to operate the consolidated tape and that the applicant has met the criteria. These measures would facilitate the transition from the selection phase to the authorization phase of the CTPs.

(3) A selected applicant seeking authorisation to operate a consolidated tape should provide in its application for authorisation a programme of operations, an organisational chart and an ownership chart. The organisational chart should identify who is responsible for the different activities to enable the European Securities and Markets Authority (ESMA) to assess whether the CTP has sufficient human resources and oversight over its business. The organisational chart should not only cover the scope of the CTP but should also include any other services that the entity provides as this may highlight areas which may affect the independence of the CTP and give rise to a conflict of interest. An applicant seeking

authorisation as a CTP should also provide information on the composition, functioning and independence of its governing bodies in order for ESMA to be able to assess whether the policies, procedures and corporate governance structure ensure the independence of the CTP and the avoidance of conflicts of interest.

(4) Any applicant seeking authorisation as a CTP should provide information on its internal control environment and its governing bodies, in order to enable ESMA to assess whether the corporate governance structure ensures the independence of the CTP and whether that structure and its reporting procedures are adequate.

(5) Conflicts of interest can arise between the CTP and data contributors or data users. In particular, those conflicts may arise where the CTP is engaged in other activities such as acting as a market operator, investment firm or trade repository. As part of its corporate governance, the CTP should adopt a comprehensive approach to identifying, preventing and managing existing and potential conflicts of interest, including preparing an inventory of conflicts of interest and implementing appropriate policies and procedures to manage those conflicts and, where necessary, separate business functions and personnel to limit the flow of sensitive information between different business areas of the CTP.

(6) All members of the management body of a CTP should be persons who are of sufficiently good repute and possess sufficient knowledge, skills and experience, as those persons play a key role in ensuring that the CTP meets its regulatory obligations and contribute to the business strategy of the CTP. It is therefore important for the CTP to demonstrate that it has a robust process for appointing and evaluating the performance of members of the management body and that clear reporting lines and regular reporting to the management body are in place.

(7) CTPs fall under the scope of Regulation (EU) 2022/2554 (Digital Operational Resilience Act or DORA) and are therefore subject to the digital operational resilience requirement included therein. CTPs should demonstrate compliance in the areas of ICT risk-management, outsourcing, business continuity and back-up facilities, testing and capacity, security and incidents reporting to ESMA. It is therefore important that applicants are able to demonstrate during the authorisation phase their ability to comply with the requirements in DORA as soon as they start operating the consolidated tape.

(8) A CTP should monitor that the data it is publishing is accurate and complete and should ensure that it has mechanisms for detecting errors or omissions caused by the data contributors or itself, in accordance with Article 10 of [RTS on input/output data]. According with Article 10(4) of DORA, CTPs should detect completeness, omission and errors of trade reports published in their systems.

(9) A CTP should ensure that its systems are able to ingest data from trading venues and APAs and to consolidate this information to clients and to the public without disruptions. A CTP

should consolidate and publish data at the speed defined under Article 3 of [RTS on input/output data.

(10) CTPs should be able to delete and amend the information which they receive from an entity providing them with information to deal with situations where, in exceptional circumstances, the data contributor is experiencing technical difficulties and cannot delete or amend the information itself. However, CTPs should not otherwise be responsible for correcting information contained in published reports where the error or omission was attributable to the entity providing the information. This is due to the fact that CTPs cannot know with certainty whether a perceived error or omission is indeed incorrect since they were not party to the executed trade.

(11) A CTP should also ensure that it stores the trade reporting information which it handles for a sufficiently long period of time in order to facilitate the retrieval of historical information by competent authorities. CTPs should ensure that they establish the necessary organisational arrangements to maintain the data for at least the period specified in Regulation (EU) No 600/2014 and are able to respond to any request to provide services regulated by this Regulation.

(12) A CTP should consistently disclose the total expenditure allocated to operate the consolidated tape, as well as the fees charged to clients in accordance with Article 17 of [RTS on RCB] and the revenue distribution mechanisms for bonds.

(13) A CTP should provide the expected Power Utilisation Effectiveness (PUE) ratio to enable ESMA to understand the energy efficiency over the activities related to data processing and hosting, in accordance with the European Code of Conduct on Data Centre Energy Efficiency and Regulation (EU) No 2020/852.

(14) This Regulation is based on the draft regulatory technical standards submitted by ESMA to the Commission.

(15) ESMA has conducted open public consultations on the draft regulatory technical standards on which this Regulation is based, analysed the potential related costs and benefits and requested the opinion of the Securities and Markets Stakeholder Group established by Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council (3),

HAS ADOPTED THIS REGULATION:

Article 1

Information to ESMA

1. A selected applicant seeking authorisation to operate a consolidated tape shall submit to ESMA the information set out from Articles 2 to 16 and the information

regarding all the organisational requirements set out in Article 27h of Regulation (EU) No 600/2014.

2. A CTP shall promptly inform ESMA of any material change to the information provided at the time of the authorisation and thereafter.

Article 2

Information on the ownership

(Articles 27da(2)(d) of Regulation (EU) No 600/2014)

1. An application for the authorisation of a CTP shall contain:
 - a. a list containing the name of each person or entity who directly or indirectly holds 5% or more of the applicant's capital or of its voting rights or whose holding makes it possible to exercise a significant influence over the applicants management;
 - b. a list of any undertakings in which a person referred to in point (a) holds 5 % or more of the capital or voting rights or over whose management they exercise a significant influence;
 - c. a chart showing the ownership links between the parent undertaking, subsidiaries and any other associated entities or branches;
 - d. The undertakings shown in the chart referred to in paragraph 2 shall be identified by their full name, legal status and legal address.

Article 3

Information on the organisation

(Articles 27da(2)(d) and Article 27db(1) of Regulation (EU) No 600/2014)

1. A selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation the information on the organisation referred to in Article 27da(2) of Regulation (EU) No 600/2014. The application shall include the following information:
 - a. information on the organisational structure of the applicant, including an organisational chart and a description of the human, technical and legal resources allocated to its business activities;

- b. information on the operational separation policies and procedures to ensure segregation between the CTP and any other activity performed by the firm;
- c. information on the compliance policies and procedures of the CTP, including:
 - i. the name of the person or persons responsible for the approval and maintenance of those policies;
 - ii. the arrangements to monitor and enforce the compliance policies and procedures;
 - iii. the measures to be undertaken in the event of a breach which may result in a failure to meet the conditions for initial authorisation;
 - iv. a description of the procedure for reporting to ESMA any breach which may result in a failure to meet the conditions for initial authorisation;
 - v. a list of all outsourced functions and resources allocated to the control of the outsourced functions.
- d. A CTP offering services other than data reporting services shall describe those services in the organisational chart.

Article 4

Corporate governance

(Articles 27da(2)(d) of Regulation (EU) No 600/2014)

- 1. A selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation information on the internal corporate governance policies and the procedures which govern its management body, senior management, and, where established, committees.
- 2. The information set out in paragraph 1 shall include:
 - a. a description of the processes for selection, appointment, performance evaluation and removal of senior management and members of the management body;
 - b. a description of the reporting lines and the frequency of reporting to the senior management and the management body;
 - c. a description of the policies and procedures on access to documents by members of the management body.

Article 5

Information on the members of the management body

(Articles 27f(2) of Regulation (EU) No 600/2014)

1. A selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation the following information in respect of each member of the management body:
 - a. name, date and place of birth, personal national identification number or an equivalent thereof, address and contact details;
 - b. the position for which the person is or will be appointed;
 - c. a curriculum vitae evidencing sufficient experience and knowledge to adequately perform the responsibilities;
 - d. criminal records, notably through an official certificate, or, where such a document is not available in the relevant Member State, a self-declaration of good repute and the authorisation to ESMA to inquire whether the member has been convicted of any criminal offence in connection with the provision of financial or data services or in relation to acts of fraud or embezzlement;
 - e. a self-declaration of good repute and the authorisation to ESMA to inquire whether the member:
 - i. has been subject to an adverse judicial finding in civil proceedings before a court in connection with the provision of financial or data services, or for misconduct or fraud in the management of a business;
 - ii. has been subject to an adverse judicial finding in civil proceedings before a court in connection with the provision of financial or data services, or for misconduct or fraud in the management of a business;
 - iii. has been part of the management body of an undertaking which was subject to an adverse decision or penalty by a regulatory authority or whose registration or authorisation was withdrawn by a regulatory authority;
 - iv. has been refused the right to carry on activities which require registration or authorisation by a regulatory authority;

- v. has been part of the management body of an undertaking which has gone into insolvency or liquidation while the person held such position or within a year after which the person ceased to hold such position;
 - vi. has been otherwise fined, suspended, disqualified, or been subject to any other sanction in relation to fraud, embezzlement or in connection with the provision of financial or data services, by a professional body;
 - vii. has been disqualified from acting as a director, disqualified from acting in any managerial capacity, dismissed from employment or other appointment in an undertaking as a consequence of misconduct or malpractice;
- f. an indication of the minimum time that is to be devoted to the performance of the person's functions within the CTP;
- g. a declaration of any potential conflicts of interest that may exist or arise in performing the duties and how those conflicts are managed.

Article 6

Internal controls

Articles 27da(2)(d) of Regulation (EU) No 600/2014

1. A selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation the information regarding its control environment. This shall include information regarding its compliance function, risk assessment, internal control mechanisms and arrangements of its internal audit function.
2. The detailed information referred to in paragraph 1 shall contain:
 - a. an outline of the applicant's control environment, including where it relies on outsourced functions;
 - b. an assessment of its key risks that may arise in the running the consolidated tape;
 - c. the applicant's internal control policies and procedures to ensure the consistent and effective implementation of those policies;
 - d. any policies, procedures and manuals for monitoring and evaluating the adequacy and effectiveness of the applicant's systems;

- e. any policies, procedures and manuals for controlling and safeguarding the applicant's information processing systems;
 - f. the identity of the internal bodies in charge of evaluating any internal control findings.
3. An application for authorisation as a CTP shall contain the following information with respect to the applicant's internal audit function:
- a. Information on its adherence to national or international professional standards;
 - b. in case there is an Internal Audit Committee, its composition, competences and responsibilities;
 - c. its internal audit function charter, methodologies, standards and procedures;
 - d. an explanation of how its internal audit methodology is developed and applied taking into account the nature of the applicant's activities, complexities and risks;
 - e. a work plan for the Internal Audit Committee for the three years following the date of application, focusing on the nature and extent of the applicant's activities, complexities and risks.

Article 7

Conflicts of interest

(Articles 27da(2)(d) of Regulation (EU) No 600/2014)

1. A selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation the information regarding its administrative arrangements, designed to prevent conflicts of interest. Such arrangements shall include policies and procedures for identifying, managing and disclosing existing and potential conflicts of interest and shall contain:
- a. an inventory of existing and potential conflicts of interest, setting out their description, identification, prevention, management and disclosure;
 - b. the separation of duties and business functions within the CTP including:
 - i. measures to prevent or control the exchange of information where a risk of conflicts of interest may arise;

- ii. the separate supervision of relevant persons whose main functions involve interests that are potentially in conflict with those of a client.
- c. a description of the remuneration policy for the members of the management body and senior management;
- d. the rules regarding the acceptance of money, gifts or favours by staff of the CTP and its management body.

Article 8

Business operativity

(Articles 27da(g) and (i) of Regulation (EU) No 600/2014)

1. A selected applicant seeking authorisation to operate a consolidated tape shall include in its application the following information:
 - a. the expected total capital expenditure and the expected operating expenditure to run the consolidated tape;
 - b. a description of the liquid net assets funded by equity to cover potential general business losses in order to continue providing services.
2. Applicants for the consolidated tape for bonds shall also provide the arrangements for revenue distribution entered into with data contributors.

Article 9

Outsourcing

(Articles 27da(2)(a) and 27da(2)(l) of Regulation (EU) No 600/2014)

1. Without prejudice to the obligations set in Regulation (EU) 2022/2554 on management of ICT third-party risk, where a CTP arranges for activities to be performed on its behalf by third parties, including undertakings with which it has close links, a selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation confirmation that the third party service provider has the ability and the capacity, to perform the activities reliably and professionally.
2. An applicant shall specify which of the activities are to be outsourced, including a specification of the level of human and technical resources needed to carry out each of those activities.

3. An applicant CTP that outsources activities shall provide evidence that the outsourcing does not reduce its ability or power to perform senior management or management body functions.
4. An applicant shall provide evidence that it remains responsible for any outsourced activity and shall adopt organisational measures to ensure:
 - a. that it assesses whether the third-party service provider is carrying out outsourced activities effectively and in compliance with applicable laws and regulatory requirements and adequately addresses identified failures;
 - b. the identification of the risks in relation to outsourced activities and adequate periodic monitoring;
 - c. adequate control procedures with respect to outsourced activities, including effectively supervising the activities and their risks within the data reporting services provider;
 - d. adequate business continuity of outsourced activities;

For the purposes of point (d), the CTP shall obtain information on the business continuity arrangements of the third-party service provider, assess its quality and, where needed, request improvements.
5. Where an applicant outsources any critical function, it shall provide ESMA with:
 - a. the identification of the third-party service provider;
 - b. the organisational measures and policies with respect to outsourcing and the risks posed by it as specified in paragraph 4;
 - c. internal or external reports on the outsourced activities.

Article 10

Market data fees and licensing models

(Articles 27da(2)(h) of Regulation (EU) No 600/2014)

1. A selected applicant seeking for authorisation to operate a consolidated tape shall comply with the requirements set in Chapters I, II, III, IV and V of [RTS ON RCB] and shall provide ESMA with the market data policies referred to in Article 17 of [RTS on RCB].

Article 11

Digital Operational Resilience

(Articles 27da(2)(a), (b) and (l) of Regulation (EU) No 600/2014)

1. Without prejudice to the obligations set in Regulation (EU) 2022/2554, a selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation evidence that the CTP complies with the requirements on ICT risk management organisation and capabilities, operational resilience strategy and testing, incident management and ICT third-party risk monitoring.
2. The information set out in paragraph 1 should take into account the size and overall risk profile, and the nature, scale and complexity of its services, activities and operations.
3. The information set out in paragraph 1 shall include policies and procedures regarding the CTP's arrangements on:
 - a. ICT risk-management;
 - b. ICT-related incident management;
 - c. Digital operational resilience testing;
 - d. ICT third-party risk monitoring.

Article 12

Energy efficiency

(Articles 27da(2)(m) of Regulation (EU) No 600/2014)

1. A selected applicant seeking authorisation to operate a consolidated tape shall include in its application for authorisation the expected power utilisation effectiveness ratio as defined by [ISO/IEC 30134-2:2016](#) and the European Code of Conduct on Data Centre Energy Efficiency.
2. For the calculation of the expected power utilisation effectiveness ratio set out in paragraph 1, applicants shall consider the data processing, hosting and related

activities in accordance with activity 8.1 under Commission Delegated Regulation (EU) 2021/2139⁵¹.

Article 13

Record keeping arrangements

(Articles 27da(2)(k) of Regulation (EU) No 600/2014)

1. A selected applicant seeking authorisation to operate a consolidated tape shall provide ESMA with the arrangements adopted to ensure that:
 - a. each key stage of the CTP business may be reconstituted;
 - b. the original content of a record before any corrections or other amendments may be recorded, traced and retrieved;
 - c. measures to prevent unauthorised alteration of records are in place;
 - d. the data recorded are secured and confidential;
 - e. a mechanism for identifying and correcting errors is incorporated in the record keeping system;
 - f. the timely recovery of the records in the case of a system failure.

Article 14

Organisational requirements

(Articles 27da(2)(b) of Regulation (EU) No 600/2014)

2. A selected applicant seeking authorisation to operate a consolidated tape shall provide ESMA with the arrangements in place to ensure to comply with the organisational requirements laid down in Article 27h of MiFIR.

⁵¹ Commission Delegated Regulation (EU) 2021/2139 of 4 June 2021 supplementing Regulation (EU) 2020/852 of the European Parliament and of the Council by establishing the technical screening criteria for determining the conditions under which an economic activity qualifies as contributing substantially to climate change mitigation or climate change adaptation and for determining whether that economic activity causes no significant harm to any of the other environmental objectives.

Article 15

Reception, consolidation and dissemination of data and data quality

(Articles 27da(2)(c), (e), (f) and (j) of Regulation (EU) No 600/2014)

1. A selected applicant seeking authorisation to operate a consolidated tape shall provide ESMA with:
 - a. the protocols required in Article 10 of [RTS on input/output data] to ensure the reception, consolidation and dissemination of the data referred to in Article 27da(2)(c) of MiFIR are in place;
 - b. the technical description of the systems adopted to ensure that the speed for dissemination of core market data and regulatory data matches the information for which it has been selected;
 - c. the technical description of the methods adopted to ensure data quality, in accordance with the requirements of Article 10 of [RTS on input/output data];
 - d. documentation certifying that the modern interface technologies adopted for the dissemination of market data and for connectivity comply with the minimum requirements set in Article 9 of [RTS on input/output data].

Article 16

Joint authorization

(Article 27da(2)(n) of Regulation (EU) No 600/2014)

1. The selected applicants jointly seeking authorisation to operate a consolidated tape shall provide ESMA with the technical and logistical arrangements adopted due to the inability to operate the consolidated tape individually and the consequent necessity to operate it jointly.
2. The entities authorised to jointly operate the consolidate tape shall inform ESMA of any change to their partnership that might impact the technical and logistical arrangements in place and ultimately affect the consolidated tape operativity.

Article 17

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done in Brussels, XX XXXX 2024.

For the Commission

The President

8.3.7 Draft ITS on the authorisation of CTPs

COMMISSION DELEGATED REGULATION (EU) 20XX/XXX

of XX XXXX 202X

supplementing Regulation 20X4/XX/EU of the European Parliament and of the Council with regard to implementing technical standards with regard to the standard forms, templates and procedures for the authorisation of consolidated tape providers and related notifications

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation XXX/2024/ of XX March 2024 of the European Parliament and of the Council on markets in financial instruments and amending Regulation 600/2014/EC and in particular Article 27d(8, thereof,

Whereas:

(1) It is appropriate to set out common standard forms, templates and procedures to ensure a common understanding and enforcement for ESMA of the authorisation process regarding the provision of consolidated tape providers (CTP) services as well as to ensure efficient information flows. In order to facilitate communications between the applicant and the ESMA, ESMA should designate a contact point and should publish the information on that contact point on their website.

(2) The organisational requirements for CTPs differ from each other in some respects, based on the asset class the entity intends to operate. As a result, an applicant should only be required to include in its application the information needed for assessing the application for the CTP service it intends to provide.

(3) In order to allow ESMA to assess whether changes to the management body of an CTP may pose a threat to the effective, sound and prudent management of the CTP and to adequately take into consideration of the interests of its clients and the integrity of the market, it is appropriate to set out clear time limits for the submission of information on those changes.

(4) CTPs should be able to submit information on a change to the management body after that change takes effect where the change is due to factors beyond the control of the CTP.

(5) This Regulation is based on the draft implementing technical standards submitted by the European Securities and Markets Authority (ESMA) to the Commission.

(6) ESMA has conducted open public consultations on the draft implementing technical standards on which this Regulation is based. ESMA has not analysed potential related costs and benefits as this would have been disproportionate in relation to their scope and impact.

(7) ESMA has requested the opinion of the Securities and Markets Stakeholder Group established by Article 37 of Regulation (EU) No 1095/2010 of the European Parliament and of the Council (2),

Article 1

Designation of a contact point

ESMA shall designate a contact point for handling all information received from applicants seeking authorisation as a consolidated tape provider. The contact details of the designated contact point shall be made public and regularly updated on ESMA's website.

Article 2

Provision of information and notification to ESMA

1. An applicant for authorisation to provide CTP services under the provisions of Title VI of Regulation (EU) No 600/2014 shall provide ESMA with all information in accordance with Article 27db(1) of Regulation (EU) No 600/2014 by filling in the application form set out in Annex I.

2. The applicant shall notify ESMA with information of all members of its management body by filling in the notification form set out in Annex II.

3. The applicant shall clearly identify in its submission which specific requirement under the provisions of Title VI of Regulation (EU) No 600/2014 it refers to and in which document attached to its submission that information is provided.

4. The applicant shall indicate in its submission whether any specific requirement under the provisions of Title VI of Regulation (EU) No 600/2014 or Commission Delegated Regulation (EU) 20XX/XXX⁵² is not applicable to the CTP service that it is applying for.

⁵² Commission Delegated Regulation (EU) 20XX/XXX of XX XX XXXX supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 87, 31.3.2017, ele p. 126).

5. ESMA shall indicate on its website whether duly completed application forms, notifications and any related additional information are to be submitted electronically.

Article 3

Receipt of application

Within 10 working days from the receipt of the application, ESMA shall send electronically an acknowledgement of receipt to the applicant, including the contact details of the contact point designated pursuant to Article 1.

Article 4

Requests for additional information

ESMA may send an information request to the applicant indicating which additional information is needed in order to proceed with the assessment of the application.

Article 5

Notification of changes to the membership of the management body

1. A CTP shall notify electronically ESMA of any change to the membership of its management body before such change takes effect.

Where, for substantiated reasons, it is not possible to make the notification before that change takes effect, it shall be made within 10 working days after the change.

2. A CTP shall provide the information on the change referred to in paragraph 1 by filling in the notification form set out in Annex III.

Article 6

Communication of the decision to grant or refuse the authorisation

ESMA shall inform the applicant electronically of its decision to grant or to refuse the authorisation.

Article 7

Entry into force and application

This Regulation shall enter into force on the twentieth day following that of its publication in the Official Journal of the European Union.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done in Brussels, XX XXXX 20XX.

For the Commission

The President

ANNEX I

Application form for authorisation to provide services as a consolidated tape provider

Reference number:.....

Date:.....

From:

Name of the applicant:

Address:

Legal Entity Identifier (where applicable)

(Contact details of the designated contact person at the applicant)

Full name:

Telephone:

Email:

To:

ESMA

Address

(Contact details of the designated contact point at ESMA)

Address:

Telephone:

Email:

Dear [insert appropriate name]

In accordance with Article 2 of the Commission Implementing Regulation (EU) 20XX/XXXX⁵³ please find the authorisation application.

- Person at the applicant in charge of preparing the notification.

Full Name:

Status/position:

Telephone:

Email:

Date:

Signature:

- Nature of the application

Authorisation – Consolidated Tape Provider (CTP)

⁵³ Commission Implementing Regulation (EU) 20XX/XXXX of XX XXXX 20XX laying down implementing technical standards with regard to standard forms, templates and procedures for the authorisation of data reporting services providers and related notifications pursuant to Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments (OJ L 162, 23.6.2017, p. 3).

Content

Please insert the information referred to under Commission Delegated Regulation (EU) 20XX/XXX⁽⁵⁴⁾. Please set out that information under the appropriate section or make reference to the relevant annexes containing the information.

Information on the ownership (Article 2 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on the organisation (Article 3 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on corporate governance (Article 4 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on management body (Article 5 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on internal controls (Article 6 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on conflict of interest (Article 7 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on business operativity (Article 8 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on outsourcing (Article 9 of Delegated Regulation (EU) 20XX/XXX)

.....

⁵⁴ Commission Delegated Regulation (EU) 20XX/XXX of 2 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 87, 31.3.2017, p. 126).

Information on Market data fees and licensing models (Article 10 of Delegated Regulation (EU) 20XX/XXX).....

Information on digital operational resilience (Article 11 of Delegated Regulation (EU) 20XX/XXX).....

Information on energy efficiency (Article 12 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on record keeping arrangements (Article 13 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on organisational requirements (Article 14 of Delegated Regulation (EU) 20XX/XXX)

.....

Information on reception, consolidation and dissemination of data and data quality (Article 15 of Delegated Regulation (EU) 20XX/XXX)

.....

Notes:

ANNEX II

Application form for the list of members of the management body

Reference number.....

Date.....

From:

Name of the applicant:

Address:

Legal Entity Identifier (where applicable):

(Contact details of the designated contact person at the applicant)

Full Name:

Telephone:

Email:

To:

ESMA

Address:

(Contact details of the designated contact point at ESMA)

Address:

Telephone:

Email:

Dear [insert appropriate name]

In accordance with Article 2 of Commission Implementing Regulation (EU) 20XX/XXXX⁽⁵⁵⁾ please find attached the notification relating to the members of the management body.

- Person at the applicant in charge of preparing the application:

Full Name:

Status/position:

Telephone:

Email:

Date:

Signature

- List of members of the management body:

Member 1

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

Private address:

Contact details (Telephone and email address)

Position.....

Curriculum vitae attached to application: Yes/No

Professional experience and other relevant experience.....

⁵⁵ Commission Implementing Regulation (EU) 2017/1110 of 22 June 2017 laying down implementing technical standards with regard to standard forms, templates and procedures for the authorisation of data reporting services providers and related notifications pursuant to Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments (OJ L 162, 23.6.2017, p. 3).

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(d) of Commission Delegated Regulation (EU) 20XX/XXX ⁽⁵⁶⁾

Self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(e) of Delegated Regulation (EU) 20XX/XXX.....

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment whether the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties pursuant to Article 27f(2) of Regulation (EU) No 600/2014 of the European Parliament and of the Council ⁽⁵⁷⁾.....

Effective date.....

[Please set out that information here or provide an explanation of how it will be provided, or make reference to the relevant annexes containing the information]

Member [N]

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

Private address:

Contact details (Telephone and email address)

Position.....

⁵⁶ Commission Delegated Regulation (EU) 20XX/XXX of 2 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 187, 31.3.2017, p. 126).

⁵⁷ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (OJ L 173, 12.6.2014, p. 349)

Curriculum vitae attached to application: Yes/No

Professional experience and other relevant experience.....

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(d) of Commission Delegated Regulation (EU) 20XX/XXX(5).....

Self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(e) of Delegated Regulation (EU) 20XX/XXX.....

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment whether the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties pursuant to Article 27f(2) of Regulation (EU) No 600/2014 of the European Parliament and of the Council (6).....

Effective date.....

ANNEX III

Application form for changes to the membership of the management body

Reference number:.....

Date:.....

From:

Name of the consolidated tape provider:

Address:

Legal Entity Identifier (where applicable):

(Contact details of the designated contact person at the data reporting services provider consolidated tape provider)

Full name:

Telephone:

Email:

To:

ESMA:

Address:

(Contact details of the designated contact point at ESMA)

Address:

Telephone:

Email:

Dear [insert appropriate name]

In accordance with Article 4 of the Commission Implementing Regulation (EU) 20XX/XXXX⁽⁵⁸⁾ please find attached the notification on changes to the membership of the management body.

- Person at the data reporting services provider in charge of preparing the notification:

Full Name:

Status/position:

Telephone:

Email:

Date:

Signed:

- Information on member(s) leaving the management body

Member 1

Full name.....

Contact details (Telephone and email address)

Position.....

Effective date of departure from management body.....

Reasons for the departure from management body.....

Member [N]

Full name.....

⁵⁸ Commission Implementing Regulation (EU) 2017/1110 of 22 June 2017 laying down implementing technical standards with regard to standard forms, templates and procedures for the authorisation of data reporting services providers and related notifications pursuant to Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments (OJ L 162, 23.6.2017, p. 3).

Contact details (Telephone and email address)

Position.....

Effective date of departure from management body.....

Reasons for the departure from management body.....

- Information on new member(s) of the management body

Member 1

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

Private address:

Contact details (telephone and email address)

Position.....

Curriculum vitae attached to application: Yes/No

Professional experience and other relevant experience.....

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(d) of Commission Delegated Regulation (EU) 20XX/XXX ⁽⁵⁹⁾

Self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(e) of Delegated Regulation (EU) 20XX/XXX (8)

⁵⁹ Commission Delegated Regulation (EU) 2017/571 of 2 June 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards on the authorisation, organisational requirements and the publication of transactions for data reporting services providers (OJ L 187, 31.3.2017, p. 126).

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment that the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties referred to in Article 27f(2) of Regulation (EU) No 600/2014 of the European Parliament and of the Council ⁽⁶⁰⁾

.....
.....
.....
.....

Effective date.....

[Please set out that information here or provide an explanation of how it will be provided, or make reference to the relevant annexes containing the information

Member [N]

Full name.....

Date and place of birth.....

Personal national identification number or equivalent thereof.....

Private address:

Position.....

Curriculum vitae attached to application: Yes/No

⁶⁰ Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (OJ L 173, 12.6.2014, p. 349).

Professional experience and other relevant experience.....

Educational qualification and relevant training.....

Criminal records attached to this application OR self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(d) of Delegated Regulation (EU) 20XX/XXX.....

Self-declaration of good repute and authorisation to ESMA to make enquiries under Article 5(e) of Delegated Regulation (EU) 20XX/XXX.....

Minimum time (approximate) that will be devoted to the performance of the person's functions within the data reporting services provider.....

Declaration of any potential conflicts of interest that may exist or arise in performing the duties and how these conflicts are managed.....

Additional information relevant for the assessment that the member is of sufficiently good repute, possesses sufficient knowledge, skills and experience and commits sufficient time to perform the duties referred to in Article 27f(2) of Regulation (EU) No 600/2014.

Effective date.....

[Please set out that information here or provide an explanation of how it will be provided, or make reference to the relevant annexes containing the information]

— Complete updated list of members of the management body:

Name	Position	Effective data

--	--	--

Name

Position

Effective date

8.4 Annex IV – Calculations of Example #2 in (section 4.1.2.2.1)

Scenario A		Result of the multiplication of the weight and the volume			Totals per venue (a) + (b) + (c)	Share of revenues to distribute per venue (a) + (b) + (c)	Total amount of CTP revenues received by each venue
		(a) Small trading venue	(b) Young instruments	(c) Pre-trade transparent system			
TV A SME	Transparent SME without new instruments	€ 5,200,000	€ -	€ 1,200,000	€ 6,400,000	1.2941%	€ 647
TV B SME	Transparent SME with new instruments	€ 5,200,000	€ 1,600,000	€ 1,200,000	€ 8,000,000	1.6176%	€ 809
TV C	Dark MTF		€ -	€ -	€ -	0.0000%	€ -
TV D	Partially transparent MTF		€ -	€ 150,000	€ 150,000	0.0303%	€ 15.17
TV E	Partially transparent RM		€ -	€ 480,000,000	€ 480,000,000	97.0579%	€ 48,529
TOTAL		€ 10,400,000	€ 1,600,000	€ 482,550,000	€ 494,550,000	100%	€ 50,000

Scenario B		Result of the multiplication of the weight and the volume			Totals per venue (a) + (b) + (c)	Share of revenues to distribute per venue (a) + (b) + (c)	Total amount of CTP revenues received by each venue
		(a) Small trading venue	(b) Young instruments	(c) Pre-trade transparent system			
TV A SME	Transparent SME without new instruments	€ 4,400,000	€ -	€ 1,200,000	€ 5,600,000	1.1342%	€ 567
TV B SME	Transparent SME with new instruments	€ 4,400,000	€ 2,400,000	€ 1,200,000	€ 8,000,000	1.6203%	€ 810
TV C	Dark MTF		€ -	€ -	€ -	0.0000%	€ -
TV D	Partially transparent MTF		€ -	€ 150,000	€ 150,000	0.0304%	€ 15.19
TV E	Partially transparent RM		€ -	€ 480,000,000	€ 480,000,000	97.2152%	€ 48,608
TOTAL		€ 8,800,000	€ 2,400,000	€ 482,550,000	€ 493,750,000	100%	€ 50,000

Scenario C		Result of the multiplication of the weight and the volume			Totals per venue (a) + (b) + (c)	Share of revenues to distribute per venue (a) + (b) + (c)	Total amount of CTP revenues received by each venue
		(a) Small trading venue	(b) Young instruments	(c) Pre-trade transparent system			
TV A SME	Transparent SME without new instruments	€ 4,800,000	€ -	€ 1,200,000	€ 6,000,000	1.2142%	€ 607
TV B SME	Transparent SME with new instruments	€ 4,800,000	€ 2,000,000	€ 1,200,000	€ 8,000,000	1.6189%	€ 809
TV C	Dark MTF	€ -	€ -	€ -	€ -	0.0000%	€ -
TV D	Partially transparent MTF	€ -	€ -	€ 150,000	€ 150,000	0.0304%	€ 15.18
TV E	Partially transparent RM	€ -	€ -	€ 480,000,000	€ 480,000,000	97.1365%	€ 48,568
TOTAL		€ 9,600,000	€ 2,000,000	€ 482,550,000	€ 494,150,000	100%	€ 50,000

Scenario D		Result of the multiplication of the weight and the volume			Totals per venue (a) + (b) + (c)	Share of revenues to distribute per venue (a) + (b) + (c)	Total amount of CTP revenues received by each venue
		(a) Small trading venue	(b) Young instruments	(c) Pre-trade transparent system			
TV A SME	Transparent SME without new instruments	€ 4,000,000	€ -	€ 1,200,000	€ 5,200,000	1.0540%	€ 527
TV B SME	Transparent SME with new instruments	€ 4,000,000	€ 2,800,000	€ 1,200,000	€ 8,000,000	1.6216%	€ 811
TV C	Dark MTF	€ -	€ -	€ -	€ -	0.0000%	€ -
TV D	Partially transparent MTF	€ -	€ -	€ 150,000	€ 150,000	0.0304%	€ 15.20
TV E	Partially transparent RM	€ -	€ -	€ 480,000,000	€ 480,000,000	97.2940%	€ 48,647
TOTAL		€ 8,000,000	€ 2,800,000	€ 482,550,000	€ 493,350,000	100%	€ 50,000

Scenario E		Result of the multiplication of the weight and the volume			Totals per venue (a) + (b) + (c)	Share of revenues to distribute per venue (a) + (b) + (c)	Total amount of CTP revenues received by each venue
		(a) Small trading venue	(b) Young instruments	(c) Pre-trade transparent system			
TV A SME	Transparent SME without new instruments	€ 3,600,000	€ -	€ 1,200,000	€ 4,800,000	0.9737%	€ 487
TV B SME	Transparent SME with new instruments	€ 3,600,000	€ 3,200,000	€ 1,200,000	€ 8,000,000	1.6229%	€ 811
TV C	Dark MTF	€ -	€ -	€ -	€ -	0.0000%	€ -
TV D	Partially transparent MTF	€ -	€ -	€ 150,000	€ 150,000	0.0304%	€ 15.21
TV E	Partially transparent RM	€ -	€ -	€ 480,000,000	€ 480,000,000	97.3730%	€ 48,686
TOTAL		€ 7,200,000	€ 3,200,000	€ 482,550,000	€ 492,950,000	100%	€ 50,000

8.5 Annex V – List of data contributors

Table 10: Groups of trading venues

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Aquis Exchange	AQUIS EXCHANGE EUROPE AUCTION ON DEMAND (AOD)	AQEU	AQEA	MLTF	2019-03-20T00:00:00.000Z		FR
Aquis Exchange	AQUIS EXCHANGE EUROPE NON DISPLAY ORDER BOOK (NDOB)	AQEU	AQED	MLTF	2022-09-05T00:00:00.000Z		FR
Aquis Exchange	NA	AQEU	AQEU	MLTF	2019-03-20T00:00:00.000Z		FR
Athens Exchange Group (ATHEXGROUP)	ATHENS EXCHANGE ALTERNATIVE MARKET	ASEX	ENAX	MLTF	2007-09-06T00:00:00.000Z		GR
Athens Exchange Group (ATHEXGROUP)	ATHENS EXCHANGE S.A. CASH MARKET	ASEX	XATH	RMKT	2007-11-01T00:00:00.000Z		GR
Bayerische Börse AG	BOERSE MUENCHEN - REGULIERTER MARKT	XMUN	MUNA	RMKT	2018-01-03T00:00:00.000Z		DE
Bayerische Börse AG	BOERSE MUENCHEN - FREIVERKEHR	XMUN	MUNB	MLTF	2018-01-03T00:00:00.000Z		DE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Bayerische Börse AG	BOERSE MUENCHEN - GETTEX - REGULIERTER MARKT	XMUN	MUNC	RMKT	2018-01-03T00:00:00.000Z		DE
Bayerische Börse AG	BOERSE MUENCHEN - GETTEX - FREIVERKEHR	XMUN	MUND	MLTF	2018-01-03T00:00:00.000Z		DE
Bloomberg	NA	BTFE	BTFE	MLTF	2019-01-15T00:00:00.000Z		NL
BÖAG Börsen AG	BOERSE DUESSELDORF - REGULIERTER MARKT	XDUS	DUSA	RMKT	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE DUESSELDORF - FREIVERKEHR	XDUS	DUSB	MLTF	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE DUESSELDORF - QUOTRIX - REGULIERTER MARKT	XDUS	DUSC	RMKT	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE DUESSELDORF - QUOTRIX MTF	XDUS	DUSD	MLTF	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE HAMBURG - REGULIERTER MARKT	XHAM	HAMA	RMKT	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE HAMBURG - FREIVERKEHR	XHAM	HAMB	MLTF	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE HAMBURG - LANG AND SCHWARZ EXCHANGE - REGULIERTER MARKT	XHAM	HAMM	RMKT	2018-01-03T00:00:00.000Z		DE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
BÖAG Börsen AG	BOERSE HAMBURG - LANG AND SCHWARZ EXCHANGE - FREIVERKEHR	XHAM	HAMN	MLTF	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE HANNOVER - REGULIERTER MARKT	XHAN	HANA	RMKT	2018-01-03T00:00:00.000Z		DE
BÖAG Börsen AG	BOERSE HANNOVER - FREIVERKEHR	XHAN	HANB	MLTF	2018-01-03T00:00:00.000Z		DE
Boerse Stuttgart Group	BOERSE STUTTGART - REGULIERTER MARKT	XSTU	STUA	RMKT	2018-01-03T00:00:00.000Z		DE
Boerse Stuttgart Group	BOERSE STUTTGART - FREIVERKEHR	XSTU	STUB	MLTF	2018-01-03T00:00:00.000Z		DE
Boerse Stuttgart Group	BOERSE STUTTGART - REGULIERTER MARKT - TECHNICAL PLATFORM 2	XSTU	STUC	RMKT	2018-01-03T00:00:00.000Z		DE
Boerse Stuttgart Group	BOERSE STUTTGART - FREIVERKEHR - TECHNICAL PLATFORM 2	XSTU	STUD	MLTF	2018-01-03T00:00:00.000Z		DE
Boerse Stuttgart Group	BOERSE STUTTGART - REGULIERTER MARKT - TECHNICAL PLATFORM 3	XSTU	STUE	RMKT	2022-07-01T00:00:00.000Z		DE
Boerse Stuttgart Group	BOERSE STUTTGART - FREIVERKEHR - TECHNICAL PLATFORM 3	XSTU	STUF	MLTF	2022-07-01T00:00:00.000Z		DE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Bolsas y Mercados Españoles (BME)/SIX Group AG	BME GROWTH MARKET	BMEX	GROW	MLTF	2020-07-29T00:00:00.000Z		ES
Bolsas y Mercados Españoles (BME)/SIX Group AG	BME MTF EQUITY (IIC AND ECR SEGMENTS)	BMEX	MABX	MLTF	2007-11-01T00:00:00.000Z		ES
Bolsas y Mercados Españoles (BME)/SIX Group AG	BOLSA DE BARCELONA	BMEX	XBAR	RMKT	2007-11-01T00:00:00.000Z		ES
Bolsas y Mercados Españoles (BME)/SIX Group AG	BOLSA DE VALORES DE BILBAO	BMEX	XBIL	RMKT	2007-11-01T00:00:00.000Z		ES
Bolsas y Mercados Españoles (BME)/SIX Group AG	LATIBEX	BMEX	XLAT	MLTF	2007-11-01T00:00:00.000Z		ES
Bolsas y Mercados Españoles (BME)/SIX Group AG	BOLSA DE MADRID	BMEX	XMAD	RMKT	2007-11-01T00:00:00.000Z		ES
Börse Berlin AG	BOERSE BERLIN - REGULIERTER MARKT	XBER	BERA	RMKT	2018-01-03T00:00:00.000Z		DE
Börse Berlin AG	BOERSE BERLIN - FREIVERKEHR	XBER	BERB	MLTF	2018-01-03T00:00:00.000Z		DE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Börse Berlin AG	BOERSE BERLIN - BERLIN SECOND REGULATED MARKET	XBER	BERC	RMKT	2018-01-03T00:00:00.000Z		DE
Börse Berlin AG	BOERSE BERLIN EQUIDUCT TRADING - REGULIERTER MARKT	XBER	EQTA	RMKT	2018-01-03T00:00:00.000Z		DE
Börse Berlin AG	BOERSE BERLIN EQUIDUCT TRADING - BERLIN SECOND REGULATED MARKET	XBER	EQTB	RMKT	2018-01-03T00:00:00.000Z		DE
Börse Berlin AG	BOERSE BERLIN EQUIDUCT TRADING - FREIVERKEHR	XBER	EQTC	MLTF	2018-01-03T00:00:00.000Z		DE
BOURSE DE LUXEMBOURG	EURO MTF	XLUX	EMTF	MLTF	2007-07-13T00:00:00.000Z		LU
Bratislava Stock Exchange	BRATISLAVA STOCK EXCHANGE - MTF	XBRA	EBRA	MLTF	2008-03-26T00:00:00.000Z		SK
Bratislava Stock Exchange	NA	XBRA	XBRA	RMKT	1993-04-01T00:00:00.000Z		SK
Bucharest Stock Exchange	NA	XBSE	XBSE	RMKT	2006-01-31T00:00:00.000Z		RO
Budapest Stock Exchange (BSE)	BETA MARKET	BETA	BETA	MLTF	2011-10-27T00:00:00.000Z		HU

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Budapest Stock Exchange (BSE)	NA	XBUD	XBUD	RMKT	2002-04-30T00:00:00.000Z		HU
Budapest Stock Exchange (BSE)	XTEND	XBUD	XTND	MLTF	2011-10-27T00:00:00.000Z		HU
Bulgarian Stock Exchange	BULGARIAN STOCK EXCHANGE - ALTERNATIVE MARKET	XBUL	ABUL	RMKT	2012-01-21T00:00:00.000Z		BG
Bulgarian Stock Exchange	BULGARIAN STOCK EXCHANGE - SME GROWTH MARKET BEAM	XBUL	GBUL	MLTF	2018-12-20T00:00:00.000Z		BG
Bulgarian Stock Exchange	BULGARIAN STOCK EXCHANGE - INTERNATIONAL MTF	XBUL	JBUL	MLTF	2018-01-26T00:00:00.000Z		BG
Bulgarian Stock Exchange	BULGARIAN STOCK EXCHANGE - MAIN MARKET	XBUL	ZBUL	RMKT	1998-05-15T00:00:00.000Z		BG
CAPMAN HOLDING	MTF Sofia	MBUL	MBUL	MLTF	2015-09-23T00:00:00.000Z		BG
CAPTIN	NA	CPTX	CPTX	MLTF	2017-09-29T00:00:00.000Z		NL
Cboe Exchange	CBOE EUROPE - REGULATED MARKET DARK BOOK (NL)	CCRM	BARU	RMKT	2019-03-08T00:00:00.000Z		NL

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Cboe Exchange	CBOE EUROPE - REGULATED MARKET OFF BOOK (NL)	CCRM	BEUO	RMKT	2019-03-08T00:00:00.000Z		NL
Cboe Exchange	CBOE EUROPE - REGULATED MARKET INTEGRATED BOOK (NL)	CCRM	BEUT	RMKT	2019-03-08T00:00:00.000Z		NL
Cboe Exchange	CBOE EUROPE - DXE PERIODIC (NL)	CCXE	BEUP	MLTF	2019-03-08T00:00:00.000Z		NL
Cboe Exchange	CBOE EUROPE - DXE DARK ORDER BOOK (NL)	CCXE	CEUD	MLTF	2019-03-08T00:00:00.000Z		NL
Cboe Exchange	CBOE EUROPE - DXE OFF-BOOK (NL)	CCXE	CEUO	MLTF	2019-03-08T00:00:00.000Z		NL
Cboe Exchange	CBOE EUROPE - DXE ORDER BOOKS (NL)	CCXE	CEUX	MLTF	2019-03-08T00:00:00.000Z		NL
Cboe Exchange	CBOE EUROPE - LIS SERVICE (NL)	CCXE	LISZ	MLTF	2019-03-08T00:00:00.000Z		NL
Cyprus Stock Exchange	NA	XCYS	XCYS	RMKT	2007-11-01T00:00:00.000Z		CY
CYPRUS STOCK EXCHANGE	MTF - CYPRUS EXCHANGE	XCYS	XECM	MLTF	2007-11-01T00:00:00.000Z		CY
CZECH STOCK EXCHANGE	RM-SYSTEM CZECH STOCK EXCHANGE - MTF	XRMZ	XRMO	MLTF	2018-01-03T00:00:00.000Z		CZ
Deutsche Börse AG	XETRA - REGULIERTER MARKT	XETR	XETA	RMKT	2018-01-03T00:00:00.000Z		DE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Deutsche Börse AG	XETRA - FREIVERKEHR	XETR	XETB	MLTF	2018-01-03T00:00:00.000Z		DE
Deutsche Börse AG	XETRA - SCALE	XETR	XETS	MLTF	2019-12-16T00:00:00.000Z		DE
Deutsche Börse AG	XETRA - REGULIERTERMARKT - OFF-BOOK	XETR	XETU	RMKT	2019-05-20T00:00:00.000Z		DE
Deutsche Börse AG	XETRA - FREIVERKEHR - OFF-BOOK	XETR	XETV	MLTF	2019-05-20T00:00:00.000Z		DE
Deutsche Börse AG	XETRA - SCALE - OFF-BOOK	XETR	XETW	MLTF	2019-12-16T00:00:00.000Z		DE
Deutsche Börse AG	BOERSE FRANKFURT - REGULIERTER MARKT	XFRA	FRAA	RMKT	2018-01-03T00:00:00.000Z		DE
Deutsche Börse AG	BOERSE FRANKFURT - FREIVERKEHR	XFRA	FRAB	MLTF	2018-01-03T00:00:00.000Z		DE
Deutsche Börse AG	BOERSE FRANKFURT - SCALE	XFRA	FRAS	MLTF	2019-12-16T00:00:00.000Z		DE
Deutsche Börse AG	BOERSE FRANKFURT - REGULIERTERMARKT - OFF-BOOK	XFRA	FRAU	RMKT	2023-05-22T00:00:00.000Z		DE
Deutsche Börse AG	BOERSE FRANKFURT - FREIVERKEHR - OFF-BOOK	XFRA	FRAV	MLTF	2023-05-22T00:00:00.000Z		DE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Deutsche Börse AG	BOERSE FRANKFURT - SCALE - OFF-BOOK	XFRA	FRAW	MLTF	2023-05-22T00:00:00.000Z		DE
Euronext	NA	XAMS	XAMS	RMKT	2007-02-20T00:00:00.000Z		NL
Euronext	EURONEXT GROWTH BRUSSELS	XBRU	ALXB	MLTF	2007-11-01T00:00:00.000Z		BE
Euronext	EURONEXT ACCESS BRUSSELS	XBRU	MLXB	MLTF	2007-11-01T00:00:00.000Z		BE
Euronext	EURONEXT - TRADING FACILITY BRUSSELS	XBRU	TNLB	MLTF	2007-11-01T00:00:00.000Z		BE
Euronext	EURONEXT BLOCKS	XBRU	TNLK	MLTF	2019-10-01T00:00:00.000Z		BE
Euronext	EURONEXT - VENTES PUBLIQUES BRUSSELS	XBRU	VPXB	MLTF	2007-11-01T00:00:00.000Z		BE
Euronext	NA	XBRU	XBRU	RMKT	2007-11-01T00:00:00.000Z		BE
Euronext	EURONEXT GROWTH DUBLIN	XDUB	XESM	MLTF	2019-10-11T00:00:00.000Z		IE
Euronext	EURONEXT DUBLIN	XDUB	XMSM	RMKT	2007-11-01T00:00:00.000Z		IE
Euronext	EURONEXT GROWTH LISBON	XLIS	ALXL	MLTF	2011-01-19T00:00:00.000Z		PT
Euronext	EURONEXT ACCESS LISBON	XLIS	ENXL	MLTF	2009-09-17T00:00:00.000Z		PT

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Euronext	NA	XLIS	XLIS	RMKT	2000-02-28T00:00:00.000Z		PT
Euronext	BORSA ITALIANA GLOBAL EQUITY MARKET	XMIL	BGEM	MLTF	2022-11-28T00:00:00.000Z		IT
Euronext	ELECTRONIC ETF, ETC/ETN AND OPEN-END FUNDS MARKET	XMIL	ETFP	RMKT	2007-02-27T00:00:00.000Z		IT
Euronext	EUROTLX	XMIL	ETLX	MLTF	2010-01-01T00:00:00.000Z		IT
Euronext	EURONEXT GROWTH MILAN	XMIL	EXGM	MLTF	2018-01-03T00:00:00.000Z		IT
Euronext	EURONEXT MILAN	XMIL	MTAA	RMKT	1998-01-02T00:00:00.000Z		IT
Euronext	BORSA ITALIANA - TRADING AFTER HOURS	XMIL	MTAH	MLTF	2016-07-11T00:00:00.000Z		IT
Euronext	EURONEXT GROWTH - OSLO	XOSL	MERK	MLTF	2018-01-03T00:00:00.000Z		NO
Euronext	EURONEXT EXPAND OSLO	XOSL	XOAS	RMKT	2018-01-03T00:00:00.000Z		NO
Euronext	NA	XOSL	XOSL	RMKT	2018-01-03T00:00:00.000Z		NO
Euronext	EURONEXT GROWTH PARIS	XPAR	ALXP	MLTF	2007-11-01T00:00:00.000Z		FR

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Euronext	EURONEXT ACCESS PARIS	XPAR	XMLI	MLTF	2007-11-01T00:00:00.000Z		FR
Euronext	NA	XPAR	XPAR	RMKT	2007-11-01T00:00:00.000Z		FR
Fio Financial Group	RM-System Czech Stock Exchange	XRMZ	XRMZ	RMKT	1993-03-19T00:00:00.000Z		CZ
Nasdaq	FIRST NORTH SWEDEN - NORDIC@MID	XSTO	DNSE	MLTF	2013-08-30T00:00:00.000Z		SE
Nasdaq	FIRST NORTH SWEDEN - NORWAY NORDIC@MID	XSTO	DOSE	MLTF	2013-08-30T00:00:00.000Z		SE
Nasdaq	FIRST NORTH SWEDEN - AUCTION ON DEMAND	XSTO	MNSE	MLTF	2013-08-30T00:00:00.000Z		SE
Nasdaq	FIRST NORTH SWEDEN - NORWAY AUCTION ON DEMAND	XSTO	MOSE	MLTF	2013-08-30T00:00:00.000Z		SE
Nasdaq	FIRST NORTH SWEDEN - NORWAY	XSTO	ONSE	MLTF	2013-08-30T00:00:00.000Z		SE
Nasdaq	FIRST NORTH SWEDEN - SME GROWTH MARKET	XSTO	SSME	MLTF	2018-11-01T00:00:00.000Z		SE
Nasdaq	FIRST NORTH ESTONIA	XTAL	FNEE	MLTF	2002-01-01T00:00:00.000Z		EE
Goldman Sachs	NA	SGMU	SGMU	MLTF	2020-12-15T00:00:00.000Z		FR

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Goldman Sachs	SIGMA X EUROPE AUCTION BOOK	SGMU	SGMV	MLTF	2020-12-15T00:00:00.000Z		FR
LJUBLJANA STOCK EXCHANGE	SI ENTER	XLJU	XLJM	MLTF	2017-01-18T00:00:00.000Z		SI
London Stock Exchange Group	TURQUOISE EUROPE - LIT AUCTIONS	TQEX	TQEA	MLTF	2019-03-06T00:00:00.000Z		NL
London Stock Exchange Group	TURQUOISE EUROPE - DARK	TQEX	TQEM	MLTF	2019-03-06T00:00:00.000Z		NL
London Stock Exchange Group	NA	TQEX	TQEX	MLTF	2019-03-06T00:00:00.000Z		NL
Luxembourg Stock Exchange	NA	XLUX	XLUX	RMKT	2007-07-13T00:00:00.000Z		LU
Malta Stock Exchange	NA	XMAL	XMAL	RMKT	2007-10-05T00:00:00.000Z		MT
Nasdaq	NASDAQ COPENHAGEN A/S - NORDIC@MID	XCSE	DCSE	RMKT	1996-01-10T00:00:00.000Z		DK
Nasdaq	FIRST NORTH DENMARK - NORDIC@MID	XCSE	DNDK	MLTF	2005-11-21T00:00:00.000Z		DK
Nasdaq	FIRST NORTH DENMARK -SME GROWTH MARKET	XCSE	DSME	MLTF	2019-06-16T00:00:00.000Z		DK
Nasdaq	NASDAQ COPENHAGEN A/S - AUCTION ON DEMAND	XCSE	MCSE	RMKT	1996-01-10T00:00:00.000Z		DK

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Nasdaq	FIRST NORTH DENMARK - AUCTION ON DEMAND	XCSE	MNDK	MLTF	2005-11-21T00:00:00.000Z		DK
Nasdaq	NA	XCSE	XCSE	RMKT	1996-01-10T00:00:00.000Z		DK
Nasdaq	NASDAQ HELSINKI LTD - NORDIC@MID	XHEL	DHEL	RMKT	2015-11-23T00:00:00.000Z		FI
Nasdaq	FIRST NORTH FINLAND - NORDIC@MID	XHEL	DNFI	MLTF	2015-11-23T00:00:00.000Z		FI
Nasdaq	FIRST NORTH FINLAND	XHEL	FNFI	MLTF	2011-04-04T00:00:00.000Z		FI
Nasdaq	FIRST NORTH FINLAND - SME GROWTH MARKET	XHEL	FSME	MLTF	2018-11-01T00:00:00.000Z		FI
Nasdaq	NASDAQ HELSINKI LTD - AUCTION ON DEMAND	XHEL	MHEL	RMKT	2017-06-07T00:00:00.000Z		FI
Nasdaq	FIRST NORTH FINLAND - AUCTION ON DEMAND	XHEL	MNFI	MLTF	2017-06-07T00:00:00.000Z		FI
Nasdaq	NA	XHEL	XHEL	RMKT	1999-03-19T00:00:00.000Z		FI
Nasdaq	NASDAQ ICELAND HF. - NORDIC@MID	XICE	DICE	RMKT	2016-01-01T00:00:00.000Z		IS
Nasdaq	FIRST NORTH ICELAND - NORDIC@MID	XICE	DNIS	MLTF	2016-01-01T00:00:00.000Z		IS
Nasdaq	FIRST NORTH ICELAND	XICE	FNIS	MLTF	2016-05-03T00:00:00.000Z		IS

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Nasdaq	NASDAQ ICELAND HF. - AUCTION ON DEMAND	XICE	MICE	RMKT	2016-06-01T00:00:00.000Z		IS
Nasdaq	FIRST NORTH ICELAND - AUCTION ON DEMAND	XICE	MNIS	MLTF	2016-06-01T00:00:00.000Z		IS
Nasdaq	NA	XICE	XICE	RMKT	2016-05-03T00:00:00.000Z		IS
Nasdaq	FIRST NORTH LITHUANIA	XLIT	FNLT	MLTF	2007-11-16T00:00:00.000Z		LT
Nasdaq	AB NASDAQ VILNIUS	XLIT	XLIT	RMKT	1993-05-11T00:00:00.000Z		LT
Nasdaq	FIRST NORTH LATVIA	XRIS	FNLV	MLTF	2007-05-30T00:00:00.000Z		LV
Nasdaq	NA	XRIS	XRIS	RMKT	1995-07-14T00:00:00.000Z		LV
Nasdaq	NASDAQ STOCKHOLM AB - NORDIC@MID	XSTO	DSTO	RMKT	2013-08-30T00:00:00.000Z		SE
Nasdaq	NASDAQ STOCKHOLM AB - NORWAY ETF	XSTO	ESTO	RMKT	2013-08-30T00:00:00.000Z		SE
Nasdaq	NASDAQ STOCKHOLM AB - AUCTION ON DEMAND	XSTO	MSTO	RMKT	2013-08-30T00:00:00.000Z		SE
Nasdaq	NA	XSTO	XSTO	RMKT	2013-08-30T00:00:00.000Z		SE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
Nasdaq	NA	XTAL	XTAL	RMKT	2002-01-01T00:00:00.000Z		EE
Nomura/Instinet	BLOCKMATCH EUROPE DARK	XIGG	EBLX	MLTF	2022-05-10T00:00:00.000Z		DE
Nomura/Instinet	BLOCKMATCH EUROPE RFQ	XIGG	ERFQ	MLTF	2022-05-10T00:00:00.000Z		DE
Nordic Growth Market	NORDIC SME	XNGM	NSME	MLTF	2019-06-26T00:00:00.000Z		SE
Nordic Growth Market	NA	XNGM	XNGM	RMKT	2007-11-01T00:00:00.000Z		SE
NPEX	NA	NPEX	NPEX	MLTF	2018-03-30T00:00:00.000Z		NL
PORTFOLIO STOCK EXCHANGE	PORTFOLIO STOCK EXCHANGE	POSE	POSE	MLTF	2022-06-29T00:00:00.000Z		ES
Prague Stock Exchange	NA	XPRA	XPRA	RMKT	1992-10-23T00:00:00.000Z		CZ
Prague Stock Exchange	PRAGUE STOCK EXCHANGE - MTF	XPRA	XPRM	MLTF	2018-01-03T00:00:00.000Z		CZ
Zagreb Stock Exchange	PROGRESS MARKET	XZAG	XZAP	MLTF	2017-12-01T00:00:00.000Z		HR
PROSPECTS	PROSPECTS	XMAL	PROS	MLTF	2016-02-12T00:00:00.000Z		MT
SPOTLIGHT STOCK MARKET AB	NA	XSAT	XSAT	MLTF	2013-10-30T00:00:00.000Z		SE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
The Warsaw Stock Exchange (GPW)	WARSAW STOCK EXCHANGE/ ETPS	XWAR	WETP	RMKT	2012-05-01T00:00:00.000Z		PL
The Warsaw Stock Exchange (GPW)	WARSAW STOCK EXCHANGE/ EQUITIES/GLOBAL CONNECT - MTF	XWAR	XGLO	MLTF	2021-11-04T00:00:00.000Z		PL
The Warsaw Stock Exchange (GPW)	WARSAW STOCK EXCHANGE/ EQUITIES/NEW CONNECT - MTF	XWAR	XNCO	MLTF	2008-01-01T00:00:00.000Z		PL
TPICAP	NA	LEUE	LEUE	MLTF	2019-03-21T00:00:00.000Z	2023-07-03T00:00:00.000Z	IE
TPICAP	TP ICAP EU - MTF - LIQUIDNET EU EQUITY	TPIC	LNEQ	MLTF	2023-05-01T00:00:00.000Z		FR
TPICAP	TP ICAP EU - MTF - REGISTRATION	TPIC	TPIR	MLTF	2019-05-22T00:00:00.000Z		FR
TradeGate AG	TRADEGATE EXCHANGE - FREIVERKEHR	TGAT	XGAT	MLTF	2018-01-03T00:00:00.000Z		DE
Tradeweb	TRADEWEB EU BV - MTF	TWEU	TWEM	MLTF	2019-01-14T00:00:00.000Z		NL
Virtu Financial	POSIT AUCTION	ITGL	XPAC	MLTF	2018-01-03T00:00:00.000Z		IE
Virtu Financial	POSIT DARK	ITGL	XPOS	MLTF	2007-11-01T00:00:00.000Z		IE

Group	Trading venue name	Operating MIC	Segment MIC	TV Type	Start Date	End Date	RCA
VORVEL SIM SPA	VORVEL EQUITY AUCTION	HMTF	HMOD	MLTF	2008-01-29T00:00:00.000Z		IT
Warsaw Stock Exchange	NA	XWAR	XWAR	RMKT	2005-06-01T00:00:00.000Z		PL
Wiener Börse AG	WIENER BOERSE AG AMTLICHER HANDEL (OFFICIAL MARKET)	XWBO	WBAH	RMKT	2018-01-03T00:00:00.000Z		AT
Wiener Börse AG	WIENER BOERSE AG VIENNA MTF (VIENNA MTF)	XWBO	WBDM	MLTF	2018-01-03T00:00:00.000Z		AT
XCAN	CAN - ATS	XBSE	XCAN	MLTF	2008-07-23T00:00:00.000Z		RO
Zagreb Stock Exchange	Ljubljana Stock Exchange	XLJU	XLJU	RMKT	1990-03-01T00:00:00.000Z		SI
Zagreb Stock Exchange	NA	XZAG	XZAG	RMKT	2005-06-01T00:00:00.000Z		HR

8.6 Annex VI – Summary of workshops in preparation of the CP

1. ESMA organized two workshops on the approach to the CTP selection criteria with the objective of initiating and maintaining interactions with stakeholders as well as to gather preliminary feedback on the topic.
2. A first workshop with potential applicants was organised on 15 February 2024. 77 participants attended the meeting including representatives of 14 potential applicants, representatives from the European Commission and NCAs. A second workshop with market participants, in particular data contributors and users, took place on 14 March 2024. This time, 107 participants attended the meeting including representatives of trade associations, data contributors, CTP users and technology providers as well as representatives from the European Commission and NCAs.
3. Via the registration form to the workshops, ESMA staff collected general feedback on the main concerns and areas of interests of attendees, as well as on the envisaged use cases of CTP data.
4. First, potential applicants required further guidance on (i) the expectations for the establishment of the future CTPs at the time of the selection procedure, (ii) the steps of the selection and authorisation procedures and (iii) the practical approach to input/output data. Second, there was strong convergence across data contributors and users around which factors seem to be particularly relevant for the establishment and operation of the CTP. Namely, significant importance was placed on ensuring the operational success and technical feasibility of the CTP as well as on the fees and governance structure. Moreover, data users appeared to be particularly sensitive to data quality issues and both potential applicants and market participants called on ESMA to inform on how many data contributors would be needed to be consolidated. Third, market participants expressed a high level of interest in the data to be disseminated by the CTP, envisaging a wide array of use cases: for trading purposes, to conduct best execution analysis, market research and data analysis, and to contribute to price formation processes and for risk management purposes.
5. During both webinars, attendees had the opportunity to engage in an open discussion to share their preferences, views and concerns in relation to each of the selection criteria. In the session organised for market participants, the interventions revealed that there are different sensitivities between data users and contributors across different topics.
6. **Governance and organisational requirements:** there was strong consensus across attendees of both workshops on the fundamental importance of these aspects to guarantee the operational success of the future CTPs. Moreover, there was also a significant emphasis on the role and involvement of users and data contributors in the governance of the CTP. Market participants voiced the need to acknowledge and account for the interlinkages between governance and organisational aspects and their importance to address conflicts of interests and to ensure respect of competition rules. Lastly, there was

an active discussion among data users and contributors around the design of the governance framework for the provision of value-added services.

7. **Costs, fees and revenue redistribution:** these criteria raised substantial interest among attendees to both workshops. In the case of potential applicants, the discussion was mainly focused on the approach to be followed in relation to the fees and licensing models as well as on the link between these aspects and the CTP governance structure. In the case of market participants, the discussions were mainly centered on the approach for the fees scheme and its potential impact on the revenue redistribution capacity of the CTP. Lastly, several market participants raised awareness about the need to establish a clear licensing structure with regards to value-added services.
8. **Ability to process data and dissemination speed:** some potential applicants voiced their concerns with the findings of ESMA's "Study on data formats and transmission protocols"⁶¹ to be used by the CTP and expressed their expectations for the use of FIX MMT (or other protocols currently used in the market). They also asked for more clarity in relation to (i) the data fields that the CTP will be able to publish, (ii) on the type of pre-trade data that CTP will receive and (iii) on whether a prototype is expected by ESMA at the time of the selection procedure. In the case of market participants, their discussion was centred around the relationship between dissemination speed and data quality. Participants highlighted the importance of ensuring that the CTP is able to properly communicate data quality issues to data providers. Lastly, several attendees signalled the importance of data quality for the end product of the CTP.
9. **Data quality, modern interface and record keeping:** potential applicants asked for more clarity in relation to the protocol to be followed in case of data quality issues and highlighted that while the CTP should have a mechanism in place to identify data errors, the CTP should not have the ability to alter the data itself. Market participants on their side favoured a flexible and not too prescriptive approach in relation to the concept of modern interfaces in order for the CTP to be future proof.
10. **Resilience, cyber-risk and energy consumption:** potential applicants were concerned with the level of compliance with DORA that would be required from applicants at the time of the selection procedure. In general, participants were concerned about the interplay of the tender process/selection criteria and other legal texts (i.e., DORA or GDPR) and the need to align criteria with DORA requirements. Additionally, market participants considered that resilience requirements should relate to the digital sphere and the physical CTP infrastructure (i.e., need to comply both with DORA and CDR Directive).

⁶¹ ESMA (2024). Study on data formats and transmission protocols Assessment study of the suitable data formats and transmission protocols for the purpose of the CTPs and other reporting regimes. ESMA12-437499640-2360. Available at [ESMA12-437499640-2360 Study on data formats and transmission protocols \(europa.eu\)](https://www.esma.europa.eu/press-news/esma-statements/other-statements/2024/04/23/esma-statement-2024-10).