April 2023

Summary of SPOT inspections on the provision of market data

AUTORITÉ
DES MARCHÉS FINANCIERS
AMF

AUTORITÉ DES MARCHÉS FINANCIERS

AMF

Contents

AUTORITÉ DES MARCHÉS FINANCIERS
AMF

INTRODUCTION

In line with the supervisory priorities of the Autorité des Marchés Financiers (hereinafter referred to as "AMF") for 2022 and in relation to the strategic supervisory priorities of the European Union, a series of short thematic "SPOT"[1] inspections targeting the provision of market data were conducted over the period from March to July 2022. These inspections took place within the framework of the provisions introduced by Regulation (EU) 600/2014 of 15 May 2014 on markets in financial instruments (hereinafter referred to as "MiFIR"), which came into force on 3 January 2018, and subsequent delegated regulations.[2] The investigations covered a sample group of four firms providing market data (hereinafter referred to as "the firms") and covered the period from 1 January 2019 to 30 June 2022.

The main objective of these SPOT inspections was to ensure firms' compliance with the requirements relating to the provision of market data. Particular attention was paid to: *(i) the accessibility, clarity and transparency of market data policies; (ii) the provision of market data on a reasonable commercial basis; and (iii) the provision of comprehensive market data free of charge 15 minutes after publication.* This summary aims to shed light on the procedures for implementing the requirements relating to the provision of market data laid down by MiFIR and, in particular, those of Delegated Regulation (EU) 2017/567 of 18 May 2016. It analyses the systems in place at each firm on the date of the inspections.

Directive 2004/39/EC of 21 April 2004 ("**MiFID I**") already provided that market data be priced *"on reasonable commercial terms".* Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 (hereinafter referred to as "**MiFID II**") and MiFR and its delegated regulations, in particular Delegated Regulation (EU) 2017/567 of 18 May 2016, reinforced these requirements. Noting that the cost of market data continued to rise post-MiFID II, coupled with the increasing complexity of market data offerings, ESMA published its Guidelines on the MiFID II/MiFIR obligations on market data[3] (hereinafter referred to as the "**ESMA Guidelines**"), in force since 1 January 2022, which clarify the regulatory provisions. The AMF declared that it would apply these Guidelines on 18 October 2021.[4] The inspection task force also assessed the extent to which firms had taken steps to incorporate the clarifications provided by the Guidelines into their systems.

Nearly four years after MiFIR entered into force, the AMF has identified significant shortcomings in the sample firms' compliance with the requirements for the provision of market data.
This document is neither a position nor a recommendation. The practices identified as either "good" or "poor" highlight approaches identified during the inspections that may facilitate, or complicate, compliance with the regulations governing the provision of market data.

1 Supervision des Pratiques Opérationnelle et Thématique (operational and thematic supervision of practices).
2 In particular Commission Delegated Regulation (EU) 2017/567 of 18 May 2016.
3 The ESMA Guidelines on the MiFID II/MiFIR obligations on market data are available at: https://www.esma.europa.eu/sites/default/files/library/esma70-156-4263_guidelines_mifid_ii_mifir_obligations_on_market_data.pdf
4 https://www.amf-france.org/en/news-publications/news/market-data-amf-applies-esma-guidelines

SUMMARY OF THE MAIN FINDINGS OF THE INSPECTIONS

As an introduction, the inspection task force found that all the firms in the sample had delegated key operational functions related to the provision of market data from their trading venues to a service provider within their group of companies. However, two firms did not have an adequate contractual framework to ensure compliance with their regulatory obligations. Furthermore, one of the firms addresses matters related to the provision of market data in several committees, with outsourced activities being reported monthly to the managers of the various subsidiaries, which is a good practice. By contrast, two of the firms in the sample had no human, technical or procedural resources dedicated to the provision of market data, which is a poor practice.

With regard to the accessibility, clarity and transparency of pricing policies, numerous shortcomings and potential regulatory breaches were identified.

Firstly, with regard to the accessibility of pricing policies, one of the firms in the sample did not make the documents forming its pricing policy available in a single location (split between two separate websites) until 27 April 2022.

Secondly, with regard to the clarity and transparency of pricing policies relating to market data, the inspection task force found the following potential regulatory breaches:

- None of the firms had provided information relating in particular to the content of market data marketed for certain years following the entry into force of Delegated Regulation (EU) 2017/567; some had published incomplete or erroneous information, which would contravene the transparency obligations;
- None of the firms had fully complied with the principle of disaggregating market data in their publicly available pricing policies as required by the regulations;
- For three firms, the advance disclosure period for future market data price changes was shorter than the prescribed 90 days;
- One firm had provided largely insufficient information on how prices were set, including the cost accounting methods used and the specific principles for allocating the costs related to market data;
- Three firms had not provided publicly available information on the fees for certain uses of market data and other contractual terms and conditions for the provision of market data.

Lastly, the inspection task force identified several practices that may facilitate (hereinafter “good practices”) or complicate compliance with regulatory requirements (hereinafter “poor practices”). Among the good practices identified, two firms provide their potential clients with a form on which they can specify the intended use of the market data so that they can determine the needs of potential clients as effectively as possible. In addition, one firm publishes market data price changes 120 days in advance of these changes, a full 30 days earlier than required by the regulations. One firm also publishes documents that make it easy to identify changes between different versions of the licence agreements (tracked changes). Another firm had defined two use categories specific to retail clients, aimed at addressing the specific characteristics and constraints of these market participants. Lastly, two firms had aligned their market data policies and fee schedules with the terminology and definitions proposed in Annex I of the ESMA Guidelines.

Among the poor practices identified, one of the firms provided a complex fee schedule that was not easy to understand and could lead to the excessive use of market data by some clients in relation to their activity. Furthermore, in the case of two firms, the granularity of the data disaggregation procedure – which excludes some of the trading venues operated by the regulated entity – could be insufficient.

With regard to the publication of market data on a reasonable commercial basis, the inspection task force also found many shortcomings and also certain aspects that could contravene the applicable regulatory provisions.

Firstly, with regard to the provision of market data *"on the basis of cost"*, one firm had not explicitly based the price of market data on the cost of producing and disseminating such data, while another firm was unable to substantiate this.

Secondly, with regard to the publication of market data *"on a non-discriminatory basis"*, the inspection task force found that:

- one firm had introduced a difference in pricing for the same use of market data between different client categories according to criteria which, although objective, were not published in its market data pricing policy;
- two firms did not have any objective and publicly available criteria for defining the different client categories, which must be identical in terms of pricing and terms and conditions for providing market data;
- one firm offered, for identical market data and for the same data use, significantly higher rates for non-member clients than for member clients;
- one firm did not provide any contractual information on the option of applying charges retrospectively in the event that a client misused the data, i.e. used it contrary to the contractual terms.

Thirdly, with regard to the provision of market data *"on a per user basis"*, the inspection task force found that:

- none of the firms gave sufficient reasons nor published the reasons for refusing or potentially refusing to make market data available on a per user basis;
- three firms had not taken any steps to ensure that each use of market data was charged only once;
- while it is possible to impose conditions on eligibility for pricing on a per user fee basis, one firm imposed conditions that could be considered excessive.

With regard to the provision of market data "on a reasonable commercial basis", the inspection task force found that practices varied among the firms in the sample.

Among the poor practices observed by the inspection task force, one firm had allocated almost all of its cost lines for the provision of market data based on the proportion of trading income in the group's total income, which may be contrary to ESMA Guideline 2. Similarly, one firm had adopted an approach to allocating costs related to the provision of market data that did not take into account the depreciation of investments in the trading venue and the various links in the trading chain, even though these assets are essential to trading activity and therefore to the provision of market data. This methodology may be contrary to ESMA Guideline 2.

Furthermore, three firms had not disclosed the methods used to determine the margin produced by the provision of market data, which may not comply with the provisions of ESMA Guideline 2. In addition, for one of the firms in the sample, certain fee exemptions, although made public and, in accordance with ESMA Guideline 4, *"based on factual elements, easily verifiable and sufficiently general to pertain to more than one customer"*, may constitute a disproportionate financial advantage for certain client categories. The inspection task force also found that one firm had not provided any justification in its market data policy for the differences in fees between client categories based on objective and publicly available criteria. Lastly, one firm did not specify in its pricing policy how fees are applied when a client has multiple simultaneous uses of market data.

One of the firms had implemented pricing on a per user basis, even though the regulations permit not offering this pricing method under certain conditions. However, the conditions surrounding its implementation appeared excessive.

With regard to making market data available free of charge 15 minutes after publication (hereinafter "**delayed data**"), the inspection task force did not find any shortcomings based on the samples taken where it was possible to do this. Furthermore, some firms have set up systems whereby market data is made available free of charge at the same time as the publication of pre- and post-trade information.

However, the inspection task force found several instances of poor practice. For example, three firms indicated that they make delayed data – both pre-trade and post-trade – available to the public for a period of 24 hours, which is less than the period recommended in ESMA Guideline 18. Similarly, one firm implemented a non-automated control to check the identity and objective of persons wishing to access the delayed data via the dedicated solution, whereas the principle to be observed is to provide any user with easy access to the data and is therefore contrary to the recommendations of ESMA Guideline 17.[5] Furthermore, two firms did not have the technical means for comparing real-time publication, delayed publication and the end of free availability of delayed data.

Lastly, the inspection task force noted a good practice at all the firms in the sample group, whereby the delayed data made available to the public free of charge can be extracted automatically in a machine-readable format for use in the various solutions involved in publishing the delayed data.

[5] ESMA Guideline 17: *"The free access to delayed data should be provided to any customer, including professional customers. Market data providers may require a simple registration for the purpose of monitoring who has access to the delayed data, provided that the data remains easily accessible to any user."*

1. CONTEXT AND SCOPE

2.1. PRESENTATION OF THE SAMPLE OF INSPECTED FIRMS

These SPOT inspections were carried out jointly in four firms operating one or more trading venues.

The criteria used to select the four firms chosen were as follows:

- For each of the firms in the sample, whether they are actually engaged in market data provision activities;
- To ensure a representative sample, firms were selected that operate one or more of the existing types of trading venues, namely organised trading facilities (hereinafter "**OTFs**"),[6] multilateral trading facilities (hereinafter "**MTFs**")[7] and regulated markets.[8]

These firms have adopted relatively similar organisational structures based on outsourcing relationships. For example, all of the firms selected for these inspections outsource their market data supply activity to a service provider within the group.

However, only two firms have documented this outsourcing, while the other two have no documentation related to their organisational structure. One firm that did not document this outsourcing relationship did not even question that such a structure existed. For the two firms that have documentation relating to the outsourcing relationship in place, the contract stipulates that the group will reallocate a portion of the income generated from the provision of market data. However, the inspection task force found that one of the firms had not yet implemented this reallocation. The firm concerned nevertheless admits that this outsourcing is taking place.

---

[6] **OTFs are defined in Article L. 425-1 of the French Monetary and Financial Code** in the following terms: *"An organised trading facility is a multilateral system which ensures the convergence within the system, and at the discretion of its manager, of multiple buying and selling interests so as to conclude trades on: 1° Financial securities mentioned in Article L. 211-1 II, paragraph 2; 2° Structured finance products within the meaning of Regulation (EU) 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments; 3° Units mentioned in Article L. 229-7 of the French Environmental Code; 4° Derivatives within the meaning of Article 2(1)(29) of Regulation (EU) 600/2014 of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments; 5° Wholesale energy products, within the meaning of Article 2(4) of Regulation (EU) 1227/2011 of the European Parliament and of the Council, which must be settled by physical delivery.*
It shall operate in accordance with the provisions of this Chapter. The system shall have at least three significantly active clients or users, each of whom shall have the ability to interact with all the others with respect to price formation. The manager of an organised trading facility shall be an investment services provider other than an asset management company authorised to provide the investment service referred to in Article L. 321-1(9) or a market operator authorised by the AMF for this purpose. Where the market operator manages an organised trading facility, it shall comply with the provisions of Article L. 421-11."

[7] **MTFs are defined in Article L. 424-1 of the French Monetary and Financial Code** in the following terms: *"A multilateral trading facility is a multilateral system which ensures the convergence, within the system and in accordance with non-discretionary rules, of multiple third-party buying and selling interests in financial instruments so as to conclude trades in those instruments. It shall operate in accordance with the provisions of this Chapter. The system shall have at least three significantly active members or users, each of whom shall have the ability to interact with all the others with respect to price formation. The manager of a multilateral trading facility shall be an investment services provider other than an asset management company authorised to provide the investment service referred to in Article L. 321-1(8) or a market operator authorised by the AMF for this purpose. Where the market operator manages a multilateral trading facility, it shall comply with the provisions of Article L. 421-11."*

[8] **Regulated markets are defined in Article L. 421-1 of the French Monetary and Financial Code** in the following terms: *"I. A regulated market in financial instruments is a multilateral system which ensures or facilitates the convergence, within the system and in accordance with non-discretionary rules, of multiple third-party buying and selling interests in financial instruments in a way that results in the conclusion of contracts relating to financial instruments admitted to trading in line with the rules and systems of that market. It shall be recognised and operate in accordance with the provisions of this Chapter. II. A regulated market may also admit to trading any list of assets laid down in a decree, after the opinion of the Board of the Autorité des Marchés Financiers."*

The above-mentioned similarities between the firms in the sample in terms of their organisational structure should not overshadow major differences in the types of trading venues operated, the number of clients and, consequently, the income produced by each of them from this activity. These differences are summarised below:

***Table 1*: Presentation of the inspected sample**

Theme/Firm	Firm A	Firm B	Firm C	Firm D
Trading venues operated	**1 MTF**	**1 OTF**	**5 venues including 2 MTFs**	**1 MTF 2 OTFs**
Number of market data clients	**<50**	**Undisclosed**	**>50**	**<50**
Income generated from market data activity	**<€2 million**	**Undisclosed**	**>€2 million**	**<€2 million**

2.2. TOPICS ADDRESSED AND METHODOLOGY USED

The following topics were addressed during these inspections:

- accessibility, clarity and transparency of market data policies;
- the provision of market data on a reasonable commercial basis, including compliance with the requirements to provide market data on *(i) the basis of cost, (ii) a non-discriminatory basis* and *(iii) a per user basis*; and
- verification that market data is made available free of charge after publication.

For each inspected firm, the inspection task force analysed, for the period from 1 January 2022 to 30 June 2022, the procedures and/or policies in effect relating to the above-mentioned topics, the licence agreements relating to the provision of market data, the costs of the market data provided according to the use made of it by each firm's clients, and the time taken to make the market data available free of charge. To supplement its analysis, the inspection task force also sent each firm a questionnaire on the provision of market data in that organisation.

Lastly, the inspection task force carried out sample tests at two firms:

- The first to examine, based on a selection of invoices sent to clients, compliance with the principle of providing market data "on a non-discriminatory basis";[9]
- The second[10] to assess the effectiveness of making information available free of charge for all eligible trades 15 minutes after publication.[11]

[9] Sample selected for two firms.

[10] The task force had hoped to carry out the second sample test for all members of the sample group, but the technical procedures implemented by the firms prevented this from happening for two of them, due to the lack in their internal tools of a time stamp indicating when delayed data was made available.

[11] Sample selected for one firm.

2.3. APPLICABLE REGULATIONS

The inspection task force was supported by the following regulations and work of ESMA:

Accessibility, clarity and transparency of market data policies

- ✓ **Article 12 of MiFIR** on the obligation to make pre-trade and post-trade data available separately;
- ✓ **Article 13 of MiFIR** on the obligation to make pre-trade and post-trade data available on a reasonable commercial basis;
- ✓ **Article 10 of Delegated Regulation (EU) 2017/567** on the obligation to keep data unbundled and to disaggregate market data;
- ✓ **Article 11 of Delegated Regulation (EU) 2017/567** reminding market operators and investment firms of the obligation to disclose the price and other terms and conditions for the provision of market data in a manner which is easily accessible to the public and listing the information that must be disclosed by market data providers under the transparency obligation;
- ✓ **Article 1 of Delegated Regulation (EU) 2017/572** concerning, in particular, the criteria to be taken into account by market data providers in order to offer pre-trade and post-trade data in a disaggregated form;
- ✓ **Guideline 1 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** indicating, in particular, in what form market data providers should publish their market data policies for them to be considered *"clear and easily accessible"*;
- ✓ **Guideline 12 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** on the standardised key terminology to adopt for transparency obligations;
- ✓ **Guideline 13 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** on the standardised unit of count to adopt for transparency obligations;
- ✓ **Guideline 14 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** on the standardised publication format to adopt for transparency obligations; and
- ✓ **Guideline 15 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** on the disclosure of costs as part of transparency obligations.

Provision of market data on a reasonable commercial basis

- ✓ **Article 13 of MiFIR** on the obligation to make pre-trade and post-trade data available on a reasonable commercial basis;
- ✓ **Article 6 of Delegated Regulation (EU) 2017/567** on the obligation to provide market data on a reasonable commercial basis;
- ✓ **Article 7 of Delegated Regulation (EU) 2017/567** on the obligation to provide market data on the basis of cost;
- ✓ **Article 8 of Delegated Regulation (EU) 2017/567** on the obligation to provide market data on a non-discriminatory basis;
- ✓ **Article 9 of Delegated Regulation (EU) 2017/567** on the obligations in relation to per user fees;
- ✓ **Article L. 533-12 Monetary and Financial Code** providing, inter alia, that *"All information, including promotional communications, sent by investment services providers other than an asset management company to clients, and to potential clients in particular, must be accurate, clear and not misleading […]"*.
- ✓ **Guideline 2 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** indicating what steps should be taken by market data providers to meet the obligation to provide market data *"on the basis of cost"*;
- ✓ **Guidelines 4 to 7 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** indicating what steps should be taken by market data providers to meet the obligation to provide market data *"on a non-discriminatory basis"*;

- ✓ **Guidelines 8 to 10 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** indicating what steps should be taken by market data providers to meet the obligation to provide market data *"on a per user basis"*;

Availability of market data free of charge 15 minutes after publication

- ✓ Article 13 of MiFIR relating specifically to the obligation for market data providers to make pre-trade and post-trade data available free of charge;
- ✓ **Guidelines 17 to 19 of the ESMA Guidelines on the MiFID II/MiFIR obligations on market data** indicating what steps should be taken by market data providers to meet the obligation to make market data available free of charge 15 minutes after publication.

3. OBSERVATIONS AND ANALYSES

It should be noted at the outset that while all the firms in the sample outsource key operational functions related to the provision of market data from their trading venues to a service provider within their group, two of them did not have an adequate contractual framework to ensure compliance with their regulatory obligations.

The findings in this summary call for a significant strengthening and improvement of the operational scope of the existing arrangements in the following areas: *(i) accessibility, clarity and transparency of market data policies, (ii) the provision of market data "on a commercially reasonable basis"*, implying an obligation to provide market data on *"the basis of cost", "a non-discriminatory basis" and "a per user basis", and (iii) making market data available free of charge 15 minutes after its publication.*

3.1. ACCESSIBILITY, CLARITY AND TRANSPARENCY

The regulations require market data providers to comply with transparency obligations in relation to the provision of market data. Market operators and investment firms operating a trading facility are thus expected to disclose pricing and other terms and conditions for the provision of market data (including technical and contractual aspects) in a form that is easily accessible to the public. Article 11(2) of Delegated Regulation (EU) 2017/567 specifically lists the information that market data providers must disclose in order to comply with their transparency obligations.

The ESMA Guidelines provide details of the regulatory expectations in this area. Guideline 1 specifies the form in which market data providers should publish their market data policies for them to be considered *"clear and easily accessible"*, while Guidelines 12 to 15 recommend the adoption of standardised key terminology, unit of count and publication format, and specify how market data providers should disclose their fees for the provision of market data. Lastly, Guideline 16 clarifies the transparency requirements relating to auditing practices and the scope for retrospectively applying market data fees, which should be explicitly included in market data licence agreements.

3.1.1. Accessibility of pricing policies

With regard to the accessibility of pricing policies, the inspection task force first checked whether the firms in the sample had such policies. The inspection task force then analysed the location of these pricing policies, in particular to check that they were accessible at a single location if they consisted of several documents.

In general, the firms in the sample (with the exception of one) have set up dedicated market data provision portals on their websites. These portals includes the various policy documents relating to the market data and current fee schedules. The portals are easily accessible from the homepage of the three firms concerned. However, one of the firms had chosen to keep these documents in two different places, with the conditions for the use of market data and the relevant fee schedules made available on separate websites.

✓ **Regulatory reminder**

- Where the market data policy consists of several documents, Article 11(1) of Delegated Regulation (EU) 2017/567, as clarified by ESMA Guideline 1, requires that *"market data providers […] clearly indicate this and make all documents of the market data policy accessible via a single location on their website".*

3.1.2. Clarity and transparency of pricing policies

With regard to the clarity and transparency of pricing policies, the inspection task force checked that:

- the fees applicable to the different uses and levels of granularity and disaggregation offered for market data, along with the licence agreements applicable to the provision of market data, were publicly available and written in a clear and unambiguous manner;
- advance disclosure of future price changes by market data providers was made at least 90 days before their entry into force; and
- information on the content of market data, income arising from their provision and the way prices are set, including cost accounting methods, was publicly available for the financial years following the entry into force of Delegated Regulation (EU) 2017/567.

Over the course of its investigations, the inspection task force observed numerous shortcomings and potential breaches of the regulations on the clarity and transparency of pricing policies.

Firstly, three of the four inspected firms did not disclose the fees for certain uses in a form that was easily accessible to the public. In particular, two of them indicated that the fees associated with certain uses of market data were available on request from their sales department. Secondly, none of the firms had fully complied with the principle of disaggregating market data in their publicly available pricing policies, as required by Articles 12 of MiFIR, 10 and 11(2)(a) of Delegated Regulation (EU) 2017/567 and Article 1 of Delegated Regulation (EU) 2017/572 in particular. Thirdly, one firm had not established any mechanism for the advance disclosure of future market data price changes, while two firms had established a contractual 60-day notice period for disclosure of future price changes, which is shorter than the 90 days required under the regulations. Fourthly, the entire sample had failed to disclose (or disclosed incorrectly) some of the information required by the provisions of Article 11(2)(c) and (d) of Delegated Regulation (EU) 2017/567 or had not disclosed any of this information for several financial years. Fifthly, one of the firms had provided largely insufficient information on how prices were set, including the cost accounting methods used and the specific principles for allocating the costs related to market data. Lastly, the inspection task force noted that one of the firms in the sample had not provided any information, in its market data policy or in its current licence agreements, about its ability to charge market data fees retrospectively in the event that a client misused the market data provided (i.e. used it for purposes not covered by the agreement). However, the inspection task force observed that the firm in question was charging market data fees retrospectively in such cases.

***Table 2*: Accessibility, clarity and transparency of market data policies**

Theme/Firm	Firm A	Firm B	Firm C	Firm D
Existence of uses for which fees are not specified ("on-demand fees")	No	Yes	No	Yes
Advance disclosure of fee changes ≥90 days	No	No	Yes	No
Compliance with the principle of data disaggregation	Incomplete	No	Incomplete	Incomplete

Similarly, the inspection task force identified certain poor practices among the firms selected for this series of SPOT inspections, in that the procedures implemented could complicate compliance with the regulations. For example, at one of the inspected firms, the fee schedule in force was very complex and included a considerable number of different pricing methods, making it difficult to understand and potentially leading to excessive use of the data in relation to the activity and needs of the clients purchasing market data from this provider. Furthermore, the granularity of the market data disaggregation procedure was found to be insufficient for all firms in the sample, whether distinguishing between pre-trade and post-trade data, asset classes or trading venues.

However, a number of good practices were also identified among the inspected firms. For example, two firms in the sample provide their potential clients with a form on which they can specify the intended use of the market data, in addition to publishing standard licence agreement templates and pricing policies, so they can determine the needs of potential clients as effectively as possible. In addition, one of the inspected firms publishes changes to its market data policy and pricing 120 days before they come into effect, which is 30 days earlier than required by the regulations.

***Table 3*: Accessibility, clarity and transparency of market data policies**

Theme/Firm	Firm A	Firm B	Firm C	Firm D
Publication of an annual transparency report	Yes	Yes	Yes	Yes
Completeness and accuracy of transparency reports	No	No	No	No
Information on audit and penalty policies	No	No	Yes	No

The same firm also makes "track changes" documents available that clearly show the changes between different versions of licence agreements and pricing policies. Another firm in the sample has set up two use categories in its market data policy that are specific to and reserved for retail clients, aimed at addressing the specific characteristics and constraints of these market participants. Lastly, all firms in the sample had elected to publish a document (known as the "transparency report") aimed at meeting the transparency obligations introduced in particular by Article 11 of Delegated Regulation (EU) 2017/567. Consolidating this information into a single document, in addition to considerations relating to the completeness and accuracy of the information published, is a good

practice. Lastly, two of the inspected firms had aligned their market data policies with the terminology and definitions proposed in Annex I of the ESMA Guidelines.

✓ **Regulatory reminders:**

- Article 12(1) of MiFIR requires market data provider to *"make the information published in accordance with Articles 3, 4 and 6 to 11 available to the public by offering pre-trade and post-trade transparency data separately […]".*[12]
- Article 10(2) of Delegated Regulation (EU) 2017/567 states that *"[...] 2. Prices for market data shall be charged on the basis of the level of market data disaggregation provided for in Article 12(1) of Regulation (EU) No 600/2014".*
- Article 11(1) of Delegated Regulation (EU) 2017/567 requires market data providers to *"disclose the price and other terms and conditions for the provision of the market data in a manner which is easily accessible to the public".*
- Article 11(2) of the same Delegated Regulation (EU) states that *"The disclosure shall include the following:*

a) current price lists, including:
  - *fees per display user;*
  - *non-display fees;*
  - *discount policies;*
  - *fees associated with licence conditions;*
  - *fees for pre-trade and for post-trade market data;*
  - *fees for other subsets of information, including those required in accordance with Commission Delegated Regulation (EU) 2017/572 (5);*
  - *other contractual terms and conditions regarding the current price list;*

b) advance disclosure with a minimum of 90 days' notice of future price changes;

c) information on the content of the market data including:
  - *i) the number of instruments covered;*
  - *ii) the total turnover of instruments covered;*
  - *iii) pre-trade and post-trade market data ratio;*
  - *iv) information on any data provided in addition to market data;*
  - *v) the date of the last licence fee adaption for market data provided;*

d) revenue obtained from making market data available and the proportion of that revenue compared to the total revenue of the market operator and investment firm operating a trading venue or systematic internalisers;

e) information on how the price was set, including the cost accounting methodologies used and the specific principles according to which direct and variable joint costs are allocated and fixed joint costs are

[12] In light of the ESMA "Market Structure" Q&A, "(Level at which disaggregation is required Article 12 of MiFIR and RTS 14 18/11/2016): […]"
"Question 1 [Last update: 18/11/2016] *Will disaggregation be required at the level of the market operator or at the level of each trading venue?"*
"Answer 1 *Disaggregation is required at the level of each trading venue for which the market operator or investment firm operating a trading venue has received a specific authorisation under MiFID II*".

apportioned, between the production and dissemination of market data and other services provided by market operators and investment firms operating a trading venue or systematic internalisers".

- Article 1(1) of Delegated Regulation (EU) 2017/572 states, inter alia, that *"1. A market operator or investment firm operating a trading venue shall upon request make the information published in accordance with Articles 3, 4 and 6 to 11 of Regulation (EU) No 600/2014 available to the public by offering pre-trade and post-trade data disaggregated, in accordance with the following criteria:*

  (a) the nature of the asset class […]; (b) the country of issue for shares and sovereign debt; (c) the currency in which the financial instrument is traded; (d) scheduled daily auctions as opposed to continuous trading. […]".

✓ **Poor practices:**

- Implementing a particularly complex pricing policy that may result in potential additional costs for market data clients.
- Not offering disaggregation of pre- and post-trade market data across the various trading venues operated, or limiting data disaggregation to only some of the facilities operated by the firm.

✓ **Good practices:**

- Providing potential clients with a questionnaire aimed at assessing as accurately as possible their market data needs prior to signing the licence agreement.
- Implementing an advance disclosure period for future price changes that is longer than that laid down in Article 11(2)(b) of Delegated Regulation (EU) 2017/567, which introduces a minimum 90-day notice period.
- Making available to the public "track changes" documents that clearly show the changes between different versions of licence agreements and pricing policies.
- Establishing, within the market data policy, use categories reserved for retail clients.
- Consolidating into a single document the information published to meet the transparency obligations introduced in particular by Article 11 of Delegated Regulation (EU) 2017/567 and making that document easily accessible.
- Adopting, within the market data policy, the terminology and definitions published in Annex I of the ESMA Guidance.

3.2. PROVISION OF MARKET DATA ON A REASONABLE COMMERCIAL BASIS

The regulations also require that market data be provided on a reasonable commercial basis, in accordance with the provisions introduced by Article 6 of Delegated Regulation (EU) 2017/567. The concept of a reasonable commercial basis is defined in particular by Articles 7 to 9 of the same Delegated Regulation and is also based on compliance with the transparency obligations regarding contracts and pricing mentioned above and developed in Article 11.

The concept of a reasonable commercial basis is based in particular on compliance with:

- the obligation to provide market data on the basis of the costs of producing and disseminating such data, as defined in Article 7 of Delegated Regulation (EU) 2017/567 and clarified by ESMA Guidelines 2 and 3;
- the obligation to provide market data on a non-discriminatory basis, as defined in Article 8 of Delegated Regulation (EU) 2017/567 and clarified by ESMA Guidelines 4 to 7; and
- the obligations relating to the implementation of per user fees, as defined in Article 9 of Delegated Regulation (EU) 2017/567 and clarified by ESMA Guidelines 8 to 10.

3.2.1. Provision of market data on the basis of cost

Article 7 of Delegated Regulation (EU) 2017/567 introduces the obligation to provide market data on the basis of the costs of producing and disseminating such data, with the possibility for trading venue operators to include a reasonable margin and an appropriate proportion of the shared costs incurred by them in providing other services.

The provisions of this article are clarified by ESMA Guidelines 2 and 3. Guideline 2 provides clarification on the methods of accounting for and allocating costs, distinguishing between both direct and indirect costs and variable and fixed costs. It also provides guidance on methods for determining and disclosing the margin charged. Guideline 3 also clarifies the conditions under which possible penalty clauses may be applied in the event that a breach of the licence agreement.

With regard to the provision of market data on the basis of cost, the practices observed among the firms in the sample vary, both in terms of the methods used to disclose the cost of market data (see Section 3.1.2) and in terms of the methodology used to determine and allocate the costs associated with this activity. In this regard, the task force analysed the model used by the firms in the sample to allocate costs to this activity, along with the level of margin applied, in relation to setting prices on what are known as reasonable commercial terms. This analysis is based mainly on the material made available to the public to meet the transparency requirements introduced by Article 11 of Delegated Regulation (EU) 2017/567. The inspection task force also drew on discussions with the firms in the sample and on more detailed documentation provided by some of them.

Meetings were held with the finance teams of several of the firms to clarify how the allocations were determined and how the depreciation of investments was included in the costs of producing and disseminating market data. In general, firms consider that the provision of market data is intrinsically linked to trading activity. Consequently, a proportion of the fixed and variable costs associated with running the trading venues is allocated to the provision of market data by those firms in the sample that were able to provide the task force with information on cost allocation (two of the four firms selected).

During its investigations, the AMF found some potential regulatory breaches, along with a large number of poor practices, particularly with regard to ESMA Guideline 2. There were, however, also some good practices.

***Table 4*: Provision of market data on the basis of cost**

Theme/Firm	Firm A	Firm B	Firm C	Firm D
Is the price of market data based on the costs of producing and disseminating that data?	Yes	No	Yes	No

Does the firm disclose that it operates on a margin?	No	Yes	Yes	Yes
If so, is there an adequate explanation of how this margin is determined?	N/A	No	No	No

Firstly, with regard to the possible regulatory breaches observed, as mentioned in section 3.1.2, one of the inspected firms published largely insufficient information on how it set the price of market data and stated that it based its pricing on the fees its intra-group service provider charges for similar data. Similarly, a second firm was unable to prove that the price of the market data provided was based on the cost of producing and disseminating that data. In other words, these two firms in the sample do not base their market data prices on the cost of producing and disseminating market data.

Secondly, with regard to the poor practices identified, only one firm does not disclose to the public that it operates on a margin. Similarly, none of the firms adequately explains how the margin is determined, even though ESMA Guideline 2 states that *"market data providers should explain in their methodologies whether a margin is included and how that margin has been determined"*. With regard to cost allocation, two of the inspected firms were unable to provide information that could be used to assess the methodology used, which is also a poor practice. Of those firms in the sample that did provide detailed information, the inspection task force found that one did not distinguish between the costs of producing and the costs of disseminating market data.

***Table 5*: Provision of market data on the basis of cost**

Theme/Firm	Firm A	Firm B	Firm C	Firm D
Method for allocating costs to the provision of market data?	Yes	No	Yes	No
If so, method not based on proportion of trading income?	Yes	/	No	/
Consideration given to investments in the trading venues?	No	/	Yes	/
If so, is the depreciation of these investments taken into account?	/	/	No	/

At another firm, the approach to allocating costs to the provision of market data did not take into account the depreciation of investments in the trading venue and the various links in the trading chain, whereas ESMA Guideline 2 recommends that *"if a market data provider allocates a portion of investments in IT infrastructure to the cost of production and dissemination of market data, the market data provider is expected to consider the depreciation of the investments when allocating these costs"*. Similarly at this firm, almost all cost lines were allocated to the provision of market data based on its proportion of trading income in the group's total income, whereas ESMA Guideline 2 states that *"market data providers should not use the revenues generated by the different services and activities of their company as an allocation principle because this practice is contradictory to the obligation to set market data fees […] based on the costs of producing and disseminating market data"*.

Lastly, among the good practices observed, one of the inspected firms has a cost allocation methodology linked to market data that is not based on income generated by the different services but on the allocation of each employee to an activity on a flat-rate basis.

✓ **Regulatory reminders:**

- Article 7 of Delegated Regulation 2017/567 states that:

"1. The price of market data shall be based on the cost of producing and disseminating such data and may include a reasonable margin.

2. "The cost of producing and disseminating market data may include an appropriate share of joint costs for other services provided by market operators or investment firms operating a trading venue or by systematic internalisers".

✓ **Poor practices:**

- Not indicating whether a margin is included and how it has been determined.
- Not distinguishing in the market data pricing policy or fee schedule between the costs of producing and disseminating market data.
- Not specifying how fees are applied when a client has multiple simultaneous uses of market data.
- Using the proportion of trading income as the allocation basis for allocating costs to the market data provision activity.
- Not taking into account the depreciation of investments in the trading venue where these are partially allocated to the market data provision activity as a shared cost.

✓ **Good practice:**

- Having a cost allocation methodology linked to market data that is not based on income generated by the different services but on the allocation of each employee to the activity of providing market data on a flat-rate basis.

3.2.2. Provision of market data on a non-discriminatory basis

Article 8 of Delegated Regulation (EU) 2017/567 establishes the requirement to provide market data on a non-discriminatory basis, which is based on three factors. Firstly, market data providers must develop client categories based on objective and publicly available criteria, within which market data is made available at the same price and under the same conditions. In addition, price differences between different client categories should be proportionate to the value that the market data has for the clients, taking into account not only the scope and scale of the data, but also its use, for example, whether it is used strictly internally or for resale or further aggregation. Lastly, market data providers are required to have scalable capacity to guarantee that clients have quick access to market data on a non-discriminatory basis.

The requirements for the provision of market data on a non-discriminatory basis are specified in ESMA Guidelines 4 to 7.

Guideline 4 primarily clarifies how categories of market data clients should be determined, stating that the criteria should be *"based on factual elements, easily verifiable and sufficiently general to pertain to more than one customer"* and sufficiently explicit to ensure *"that customers are enabled to understand the category they belong to"*. It also states that market data policies should explain the fees and terms and conditions applicable to each category and justify any differentiation of these aspects. Lastly, this Guideline states that any changes to policies resulting in a change in client categorisation should be justified on objective grounds. Guideline 5 specifies how market data policies should deal with fees applied to clients potentially falling into more than one client category. Guideline 6 specifies that clients who fall within the same category should be offered the same set of options with respect to technical arrangements, which should not create any unfair advantage, for example in terms of latency or connectivity. Lastly, Guideline 7 relates to possible price reductions of market data, which should also comply with the principle to provide market data on a non-discriminatory basis, as laid down in Article 8 of Delegated Regulation (EU) 2017/567 and explained in ESMA Guideline 4.

To assess whether the firms in the sample provide market data on a non-discriminatory basis, the inspection task force analysed the pricing policies and licence agreements in force for all the firms inspected. In addition, the inspectors examined a sample of invoices sent to clients by two of the firms inspected, in order to check compliance with the principle of providing market data on a non-discriminatory basis.

It appears that only two of the four firms have granular pricing policies in place to distinguish between different client categories, depending on the depth and scale of the market data or between different use cases.[13] For example, discussions with these two firms in the sample suggest that the differences in prices charged to different client categories are intended to be proportionate to the value that the market data has for those clients.

Conversely, in terms of potential regulatory breaches, the other two firms had not established objective and public criteria for defining the various client categories within which prices and terms and conditions for providing market data are identical. Similarly, these providers had not established pricing arrangements to demonstrate that the differences in prices charged are proportionate to the value of the market data for the clients concerned, taking into account the scope and scale of the market data and the use made of it by the buyers. Furthermore, one of these two firms did not separate in its invoices the amounts charged for providing market data and those charged for other services, which made it impossible to demonstrate that the pricing for market data was non-discriminatory. In addition, one of the firms in the sample had introduced non-public price differences between different client categories for the same market data and the same use of that data.

***Table 6*: Provision of market data on a non-discriminatory basis**

Theme/Firm	Firm A	Firm B	Firm C	Firm D
Client categories: objective, public and general criteria	Yes	No	Yes	No
Market data pricing based on the client's use of the data, taking into account:				
The scope and scale of market data	Yes	No	Yes	No

[13] In particular, a distinction should be made between strictly internal uses and the ability to make data available for onward marketing by a re-distributor or to create value-added products.

Internal use or for redistribution	Yes	No	Yes	No

With regard to poor practices, the inspection task force noted that one of the firms in the sample had introduced fee exemptions for a limited number of market data uses for certain categories of clients using other services offered by the firm. Although these fee exemptions had been made public and were, in accordance with ESMA Guideline 4, *"based on factual elements, easily verifiable and sufficiently general to pertain to more than one customer"*, they may constitute a financial advantage for some clients. Furthermore, two of the firms did not specify in their market data policy how fees are applied when a client has multiple simultaneous uses of market data. Lastly, one of the firms in the sample had defined client categories based on objective and publicly available criteria, but did not sufficiently justify the differences in fees between these categories, for example based on the scale or use of market data.

✓ **Regulatory reminders:**

- Article 8(1) of Delegated Regulation (EU) 2017/567 requires market data providers to *"make market data available at the same price and on the same terms and conditions to all customers falling within the same category in accordance with published objective criteria"*.
- Article 8(2) of the same Delegated Regulation states that any *"differentials in prices charged to different categories of customers shall be proportionate to the value which the market data represents to those customers, taking into account: (a) the scope and scale of the market data including the number of financial instruments covered and their trading volume; (b) the use made by the customer of the market data, including whether it is used for the customer's own trading activities, for resale or for data aggregation"*.

✓ **Poor practices:**

- Providing fee exemptions for certain categories of clients using other services not related to the provision of market data, where these exemptions, although made public and based on factual evidence – easily verifiable and sufficiently general to pertain to more than one client – may constitute a financial advantage for some clients.
- Not specifying in the market data policy how fees are applied when a client has multiple simultaneous uses of market data.
- Not providing sufficient justification for differences in fees between different client categories, for example based on the scale or use of market data.

3.2.3. Provision of market data on a per user basis

Article 9(1) of Delegated Regulation (EU) 2017/567 sets out the requirements for charging for the use of market data according to the use made of it by the individual end-user, which is equivalent to charging fees "on a per user basis". This paragraph requires market data providers to *"put arrangements in place to ensure that each individual use of market data is charged only once"*. Article 9(2) introduces, by way of derogation from paragraph (1), the possibility for market data providers to *"decide not to make market data available on a per user basis where to charge on a per user basis is disproportionate to the cost of making that data available, having regard to the scale and scope of the data"*. Article 9(3) requires market data providers making use of the derogation introduced by

paragraph (2) to give reasons *"for the refusal to make market data available on a per user basis and [to] publish those grounds on their webpage"*.

The requirements for providing market data on a per user basis, introduced by the above-mentioned Article 9, are further clarified by ESMA Guidelines 8 to 10. Guideline 8 clarifies the definition of per user pricing and the concept of unit of count per active user. Guideline 9 states that *"market data providers should ensure that the conditions to be qualified as eligible for the per user basis require only what is necessary to make the per user basis feasible"* and introduces two criteria for this: the client's ability to *"identify correctly the number of active users who will have access to the data within the organisation"* and *"report to the market data provider the number of active users"*. Lastly, Guideline 10 clarifies the conditions for applying Article 9(3) of Delegated Regulation (EU) 2017/567 by stating, inter alia, that market data providers, where they refuse to implement charging on a per user basis, should clearly specify *"the specific features of their business model which make the adoption of the per user basis disproportionate and why these make the adoption of the model unfeasible"*.

The inspection task force checked whether the firms selected for the sample offered their clients and prospective clients the option of being charged for fees on a per user basis. In cases where this pricing option was offered, the task force checked whether it was offered to all client categories or whether certain categories were excluded. In cases where charging on a per user basis was offered but could be refused to some clients, checks were carried out to ensure that the reasons for such refusal were publicly stated on the respective data providers' websites.

Similarly, for those firms in the sample that decided to make use of the derogation introduced in Article 9(2) of Delegated Regulation (EU) 2017/567 and chose not to implement charging on a per user basis for any of their clients, the inspection task force checked that these firms had publicly justified the reasons for this refusal on their websites. Lastly, for all the firms in the sample, the inspection task force checked whether arrangements had been put in place to ensure that each use of market data was charged only once.

***Table 7*: Provision of market data on a per user basis**

Criteria/Firm	Firm A	Firm B	Firm C	Firm D
Pricing on a per user basis offered by the market data provider	**No**	**No**	**Yes**	**No**
If yes, is it possible to refuse it to certain clients/client categories?	**/**	**/**	**Yes**	**/**
If yes, are the criteria for refusal explained publicly?	**/**	**/**	**No**	**/**
If no, are the reasons for refusal stated publicly?	**No**	**No**	**/**	**No**

The due diligence carried out revealed that the requirements of the regulations were poorly applied, as three of the four inspected firms did not offer market data pricing on a per user basis but did not explain on their websites why they refuse to make market data available on a per user basis.

This pricing method is only offered by one of the firms in the sample, which reserves the right under Article 9(2) of Delegated Regulation (EU) 2017/567 to refuse it to certain clients if it considers that the cost of setting up charging on a per user basis is disproportionate to the cost of making the data available and which excludes certain client categories (such as retail clients) from the outset. With regard to this firm, the inspection task force also examined whether the conditions of eligibility for charging on a per user basis were excessive, in light of the clarifications

provided by ESMA Guideline 9. The task force found that this market data provider reserved the right to refuse this pricing option to certain clients at its own discretion without making public the criteria by which the costs of setting up charging on a per user basis could be considered disproportionate to the costs of providing the data. The review of the eligibility criteria applied by this firm also revealed the use of conditions that could be considered as falling outside the scope of what is strictly necessary for the implementation of charging on a per user basis.[14] Lastly, three firms had not put in place any arrangements to ensure that each use of market data was charged only once.

✓ **Regulatory reminders:**

- Article 9(1) of Delegated Regulation (EU) 2017/567 requires market data providers to *"charge for the use of market data according to the use made by the individual end-users of the market data ('per user basis'). Market operators and investment firms operating a trading venue and systematic internalisers shall put arrangements in place to ensure that each individual use of market data is charged only once".*

  If a market data provider makes market data available on a per user basis, the provisions of Article 9(1) of Delegated Regulation (EU) 2017/567, as clarified by ESMA Guideline 9, state that *"market data providers should ensure that the conditions to be qualified as eligible for the per user basis require only what is necessary to make the per user basis feasible"*, namely the client's ability to *"identify correctly the number of active users who will have access to the data within the organisation"* and *"report to the market data provider the number of active users"*.

- While Article 9(2) of Delegated Regulation (EU) 2017/567 provides the option for market data providers to *"decide not to make market data available on a per user basis where to charge on a per user basis is disproportionate to the cost of making that data available, having regard to the scale and scope of the data"*, Article 9(3) requires market data providers to *"provide grounds for the refusal to make market data available on a per user basis and shall publish those grounds on their webpage"*.

3.3. AVAILABILITY OF DELAYED MARKET DATA FREE OF CHARGE

Article 13 of MiFIR introduces a requirement for trading venue operators to provide pre- and post-trade delayed data free of charge, i.e. market data made available to the public – and therefore to all clients, including market professionals – 15 minutes after it is published. This regulatory requirement is further clarified by ESMA Guidelines 17 to 19, which also clarify certain provisions of Articles 64 and 65 of MiFID II applicable to Approved Publication Arrangements (APAs) and Consolidated Tape Providers (CTPs).

In this series of SPOT inspections, the firms selected for the sample operate on a total of 10 markets, including four MTFs and three OTFs. The due diligence carried out by the inspection task force was therefore in keeping with the obligations introduced by Article 13 of MIFIR.

With regard to access to data, Guideline 17 states that *"free access to delayed data should be provided to any customer, including professional customers"* and allows market data providers to "*require a simple registration for the purpose of monitoring who has access to the delayed data, provided that the data remains easily accessible to*

[14] ESMA Guideline 9 states, inter alia, that *"[m]arket data providers should ensure that the conditions to be qualified as eligible for the per user basis require only what is necessary to make the per user basis feasible"*.

any user". As regards the content of the data, *"all the trading systems operated by the trading venues"* should be covered by the delayed data publications, including at least *"all the relevant fields for the purpose of post-trade transparency […], as specified in RTS 1 and 2"*. For pre-trade data, *"it is considered sufficient to only include the first current best bid and offer prices available and the depth of trading interest at those prices".*

Guideline 18 relates to the availability and format of delayed data. It states, inter alia, that delayed data should be *"provided in a machine-readable format"* to allow *"a user to automate the data extraction"*. Regarding post-trade data, Guideline 18 states that it should be available *"for all instruments traded combined (or a class of instruments), but not on a single instrument basis only"* at least *"until midnight of the following business day to initiate the data extraction by a user"*. Pre-trade data should be *"available until the next more recent quote is available […], or in case of lack of such update, until midnight of the following business day"*.

Lastly, Guideline 19 clarified the concepts of data redistribution and value-added services and states that *"[w]ithout prejudice to the legal provisions prohibiting market data providers to charge for the use of delayed data"*, there may be *"limited instances where"* trading venue operators *"may impose a charge"*, for example if *"a delayed data user re-distributes the delayed data for a fee"* or *"creates value-added services using that data which are then sold for a fee"*. Guideline 19 also states that *"data redistribution should be understood as a business model of selling the delayed data in unchanged form to third parties"*. Lastly, it refers to the concept of value-added services as *"the creation of a product made on a basis of raw delayed data, e.g. through aggregating […] different sources or creating historical series, or combining it with other information, and offering it as a product to third parties"*.

To check compliance with these obligations, the inspection task force first analysed the procedures for making delayed data available, before checking, on a sample basis, the requirement to make the data available free of charge within 15 minutes. The inspection task force was unable to carry out the planned due diligence on three firms due to the wide disparity in the firms' technical systems and shortcomings in recording when data is published.

3.3.1. Procedures for making delayed data available free of charge

Firstly, two of the firms in the sample indicated that they had adopted a system whereby delayed data was published "immediately" free of charge (known as the "lift and shift" system) without waiting for the 15 minutes prescribed in the regulations to elapse. However, neither firm was able to provide technical proof that the data was actually published according to the stated procedures, since there was no technical solution to time-stamp the data publication or compare it with the data from the trading venue. Furthermore, the inspected task force noted that these two firms stated that they made market data available for 24 hours, which is less than the period recommended in ESMA Guideline 18. Moreover, neither of these firms apparently kept any record of when the free provision of pre-trade and post-trade market data ended, which made it impossible to verify this statement.

Furthermore, one of these two firms had implemented a non-automated control (a control requiring human intervention) to check the identity and objective of those wishing to access delayed data. However, ESMA Guideline 17 states that *"free access to delayed data should be provided to any customer, including professional customers. Market data providers may require a simple registration for the purpose of monitoring who has access to the delayed data, provided that the data remains easily accessible to any user".*

Secondly, the two remaining firms in the sample indicated that they published delayed data within the 15 minutes required under the regulations. However, neither firm provided information that the inspection task force could

use to verify this statement based on samples, because the technical implementation made it impossible to compare trading venue data published in real time, the publication of delayed data and the end of the availability of the delayed data. It should be pointed out that the inspection task force was able to ascertain that the data on the venues operated by these two firms could be extracted within 15 minutes.

Regardless of the method used to publish delayed data (immediate or within 15 minutes), the lack of traceability and retention of information relating to data publication is a poor practice for three of the four inspected firms.

***Table 8*: Procedures for making delayed data available free of charge**

Criteria/Firm	Firm A	Firm B	Firm C	Firm D
According to the firm, publication of delayed data:	**Within 15 minutes**	**Immediate "lift and shift"**	**Within 15 minutes**	**Immediate "lift and shift"**
According to the firm, length of time pre-trade data is made available:	**Midnight on trading day +1 or update**[15]	**24 hrs**	**Midnight on trading day +1 or update**[15]	**24 hrs**
According to the firm, length of time post-trade data is made available:	**Midnight on trading day +1**	**24 hrs**	**Midnight on trading day +1**	**24 hrs**
Traceability and retention of information on publications	**Yes**	**No**	**No**	**No**

With regard to good practices, the inspection task force noted that all firms in the sample indicated that they offer the option of automating the extraction, in a machine-readable format, of delayed data made available to the public free of charge. Furthermore, with regard to the provision of pre-trade delayed data, one of the firms inspected provided greater depth and visibility of the order book, in particular by providing the ten best bid and offer prices.

3.3.2. Sample analysis of compliance with delayed data requirements

Due to the significant variety of systems used, the inspection task force was only able to conduct this analysis for one of the inspected firms. This highlights the sample firms' inadequacy in demonstrating their compliance with the obligations relating to the publication of delayed market data.

For this one firm, a sample test was conducted on a total of 180 orders and transactions:

- For 100 % of transactions and orders, information on pre- and post-trade data is made available free of charge within the 15-minute time limit imposed by the regulations;
- For 100 % of transactions and orders, information on pre- and post-trade data is made available for the periods recommended by ESMA in its Guideline 18.

[15] Pre-trade data should be *"available until the next more recent quote is available […], or in case of lack of such update, until midnight of the following business day"*.

✓ **Poor practices:**

- Not having the technical means to compare the fee-based publication and free publication of delayed data (time stamping of publications).
- Not having the technical means to compare the free publication and end of availability of delayed data (time stamping of publications).
- Not making post-trade delayed data available until midnight on the following business day.
- Not making pre-trade delayed data available until midnight on the next business day or until it is replaced by the next more recent quote.
- Implementing a non-automated control (a control requiring human intervention) to check the identity and objective of those wishing to access delayed data.

✓ **Good practices:**

- Providing the option to automate the extraction, in a machine-readable format, of delayed data made available to the public free of charge.
- With regard to pre-trade delayed data, providing greater depth and visibility of the order book than is required under the regulations, by making available the ten best bid and offer prices.