

Appendix

AFME drafting suggestions for the Draft RTS on the synchronisation of business clocks

28 August 2024

We have marked up the proposed Draft RTS on the synchronisation of business clocks to reflect the comments explained at Section 5 in our response to ESMA MiFIR Review Consultation Package on Technical Standards related to Consolidated Tape Providers and DRSPs, and assessment criteria for the CTP selection procedure.

Proposed amendments are shown by redline.

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 systematic internalisers and designated publishing entities

- 1. Designated publishing entities shall record the date and time of reportable events up to one millisecond
- 1. Investment firms that are systematic internalisers or better. 2. Designated designated publishing entities shall ensure that their business clocks used to record the time time of reportable events adhere to the level of reportable events do not diverge by more than one millisecond from the reference timedefined accuracy specified in Article 1. Table 3. By derogation from paragraphs 1 and 2, of the Annex.
- 2. Investment firms that are systematic internalisers or designated publishing entities that havealso acquiredengage in multiple types of trading activity shall ensure that each trading activity adheres to the status of systematic internaliser shall complylevel of accuracy applicable to each of the trading activities in accordance with Article 2. Table 3 of the Annex.

Article 5 Level of accuracy for consolidated tape providers

Consolidated tape providers shall record the date and time of reportable events upin accordance with the requirements applicable to one millisecond or better, operators of trading venues in Article 2- and approved publication arrangements in Article 6

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 timethe requirements applicable to operators of trading venues in Article 2 and approved publication arrangements in Article 6.

defined in Article 1.

Article 6

Level of accuracy for approved publication arrangements

4.

- Approved publication arrangements shall record the date and time of reportable events
 up for each type of trading activity in accordance with the requirements applicable to
 one millisecond or betterinvestment firms in Article 4.
- 2. Approved publication arrangements shall ensure that their business clocks used to

 1. __record the time of reportable events do not diverge by more than one millisecond from the requirements for each type of trading activity in accordance with the requirements applicable to investment firms in Article 4. 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 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

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	1 microsecond or better

Table 2

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

Type of trading activity	'	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	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	1 second	1 second or better

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

<u>Table 3</u>

Level of accuracy for systematic internalisers and designated publishing entities

Type of trading activity	<u>Description</u>	Maximum divergence from UTC	Granularity of the timestamp
Voice trading activity	Means trading activity where transactions between clients or counterparties are arranged through voice or equivalent negotiation.	1 second	1 second or better
Request for quote trading activity systems	A trading system where a quote or quotes are provided in response to a request for a quote submitted by one or more clients or counterparties whereby the client or counterparty may conclude a transaction by accepting the quote or quotes provided to it on request.	1 second	1 second or better

Activity in shares,	Any activity in shares,	1 millisecond	1 millisecond or		
depository receipts,	depository receipts,	pository receipts, better			
exchange traded funds,	exchange traded funds,	-			
certificates and other	certificates and other				
similar financial	similar financial				
instruments that is not	instruments that is not				
voice trading activity or	covered by the first two				
request for quote trading	rows in this table.				
activity.					
Any other trading activity	Any other trading activity	1 second	1 second or better		
	not covered by the first				
	three rows in this table.				