Brussels, 7.6.2016
C(2016) 3316 final

COMMISSION DELEGATED REGULATION (EU) .../...
of 7.6.2016

with regard to regulatory technical standards for the level of accuracy of business clocks

(Text with EEA relevance)
EXPLANATORY MEMORANDUM

1. **CONTEXT OF THE DELEGATED ACT**

   Article 50 of Directive 2014/65/EU in financial instruments (MiFID II) introduces accuracy requirements, as it refers to the obligation of trading venues and their members/participants to record the date and time of any “reportable event using an accurate time source”. In particular, Article 50(1) of MiFID II requires Member States to oblige all trading venues and those accessing the venues to trade to synchronise the business clocks they use to record the date and time of any reportable event.

   Clock synchronisation has a direct impact in many areas within trading in financial markets. For instance, it is critical for accurate and reliable time-stamping (recording of date and time). Time-stamping is needed to define the exact moment when an event occurs (e.g. execution, pre- or post-trade publication, etc.). The role of a time-stamp is to establish evidence indicating that data existed or an event took place at a particular time. This is highly important to have a clear audit trail of which market events took place when, particularly in jurisdictions where trading is fragmented amongst multiple trading venues or in cases where markets trade different but related instruments (e.g., a derivative and the associated underlying asset). As such, it is an essential component of any surveillance system, especially for ensuring compliance with time sensitive regulatory requirements.

   Under Article 50(2) of MiFID II, ESMA is required to develop draft RTS to specify the level of accuracy to be used for clock synchronization in the Union, according to international standards.

   The draft regulatory technical standards were submitted to the Commission on 28 September 2015. In accordance with Article 10(1) of Regulation No (EU) 1095/2010 establishing the ESMA, the Commission shall decide within three months of receipt of the draft standards whether to endorse them. The Commission may also endorse the draft standards in part only, or with amendments, where the Union's interests so require, having regard to the specific procedure laid down in those Articles.

2. **CONSULTATIONS PRIOR TO THE ADOPTION OF THE ACT**

   In accordance with Article 10 of the Regulation (EU) 1095/2010 ESMA has carried out a public consultation on the draft regulatory technical standards. A consultation paper was published on 19 December 2014 on the ESMA website and the consultation closed on 2 March 2015. In addition, the ESMA invited sought the views of the Securities and Markets Stakeholder Group (SMSG) established in accordance with Article 37 of the ESMA Regulation. The SMSG chose not to provide advice on these issues due to the technical nature of the standards.

   Together with the draft technical standards, and in accordance with the third subparagraph of Article 10(1) of Regulation (EU) No 1095/2010, the ESMA has submitted its impact assessment, including the analysis of costs and benefits related to the draft technical standards. This analysis is available at http://www.esma.europa.eu/system/files/2015-esma-1464_annex_ii_-_cba_-_draft_rts_and_its_on_mifid_ii_and_mifir.pdf
3. LEGAL ELEMENTS OF THE DELEGATED ACT

This delegated Act specifies the level of accuracy to be used for clock synchronization across all trading venues and their members or participants in the EEA according to international standards. It specifies the granularity with which venues and their members have to synchronize their business clocks with. It also specifies the requirements to demonstrate the above requirements.
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

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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


Whereas:

(1) Clock synchronisation has a direct impact in many areas. In particular it contributes to ensuring that post-trade transparency data can readily 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.

(2) The number of orders received every second by a trading venue can be very high, much higher than that of executed transactions. This may extend to several thousands of orders per second depending on the trading venue, the type of members or participants or clients of a given trading venue, and the financial instruments’ volatility and liquidity. As a result, a time granularity of one second would not be sufficient for the purposes of effective market manipulation surveillance of certain types of trading activities. Therefore, it is necessary to establish minimum granularity requirements for recording the date and time of reportable events by operators of trading venues and their members or participants.

(3) 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.

(4) 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.

(5) 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.

(6) For reasons of consistency and in order to ensure the smooth functioning of the financial markets, it is necessary that the provisions laid down in this Regulation and the related national provisions transposing Directive 2014/65/EU apply from the same date.

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

(8) 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 Council²,

HAS ADOPTED THIS REGULATION:

**Article 1**

**Reference time**

Operators of trading venues and their members or participants 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 latest Bureau International des Poids et Mesures Annual Report on Time Activities. Operators of trading venues and their members or participants 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.

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Article 2

Level of accuracy for operators of trading venues

1. Operators of trading venues 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 of this Article, operators of trading venues 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\(^3\) shall ensure that their business clocks do not diverge by more than one second from UTC referred to in Article 1(1) of this Regulation. The operator of the trading venue shall ensure that times are recorded to at least a one second granularity.

3. Operators of trading venues 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 or participants of a trading venue

1. Members or participants 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 or participants 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

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. Reviews of the compliance with this Regulation of the traceability system shall be conducted at least once a year.

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Article 5

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 apply from the date that appears first in the second subparagraph of Article 93(1) of Directive 65/2014/EU.

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

Done at Brussels, 7.6.2016

For the Commission
The President
Jean-Claude JUNCKER