European Securities and Markets Authority

Guidelines

Calibration of circuit breakers and publication of trading halts under MiFID II

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1 Scope

Who?

1. These guidelines apply to trading venues that allow or enable algorithmic trading on their systems and to competent authorities.

What?

2. These guidelines clarify the provisions of Article 48(5) of the Directive 2014/65/EU of the European Parliament and of the Council on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (MiFID II)[1].

3. These Guidelines are not restricted to a specific type of circuit breaker and apply indistinctly to all mechanisms that trading venues could potentially set in place in accordance with Article 48(5) of MiFID II.

When?

4. These guidelines apply from 3 January 2018.

[1] OJ L 173, 12.6.2014, p. 349–496.

2 Definitions

5. Unless otherwise specified, terms used in MiFID II have the same meaning in these guidelines. In addition, the following definitions apply:

Circuit breakers	Mechanisms to be set in place by trading venues in accordance with Article 48(5) of MiFID to temporarily halt or constrain trading if there is a significant price movement in a financial instrument.
Trading halts	Trading halts include the following types of mechanisms:

- Mechanisms that interrupt continuous trading, encompassing:
    - Mechanisms whereby trading stops on a certain security for a certain time period, on which no trades are executed and no new prices are determined; and
    - Mechanisms whereby trading switches from continuous trading to a call auction. This can take place following a trade or following the introduction of an order that would result in a trade outside the static price ranges pre-determined by the trading venue.
- mechanisms that extend the period of scheduled or unscheduled call auctions in case of price divergence with respect to a pre-defined reference price at the end of the auction.

3 Purpose

6. The purpose of these guidelines is to develop common standards to be taken into consideration by trading venues for the calibration of their circuit breakers and, more generally, to ensure consistent application of the provisions in Articles 48(5) of the MiFID II.

4 Compliance and reporting obligations

4.1 Status of the guidelines

7. This document contains guidelines issued under Article 48(13) of MiFID II and supplemented by guidelines issued under Article 16 of Regulation (EU) No 1095/2010 (ESMA Regulation)[2]. In accordance with Article 16(3) of the ESMA Regulation, competent authorities and financial market participants must make every effort to comply with guidelines and recommendations.

8. Competent authorities to whom the guidelines apply should comply by incorporating them into their supervisory practices, including where particular guidelines within the document are directed primarily at financial market participants.

4.2 Reporting requirements

9. Competent authorities to which these guidelines apply must notify ESMA whether they comply or intend to comply with the guidelines, with reasons for non-compliance, within two months of the date of publication by ESMA in all EU official languages to smk@esma.europa.eu. In the absence of a response by this deadline, competent authorities will be considered as non-compliant. A template for notifications is available from the ESMA website.

10. Financial market participants are not required to report whether they comply with these guidelines.

5 Guidelines on Article 48(5) of MiFID II

5.1 Calibration of volatility parameters

11. The circuit breakers put in place by trading venues should use reference prices which reflect the volatility behaviour of the concerned instrument in a reliable and consistent way and, where appropriate, should have the ability to refer to external references.

12. Trading venues should calibrate their circuit breakers according to a pre-defined, statistically supported methodology, taking the following non-exhaustive list of elements into account, where appropriate:

- **The nature of the financial instrument:** in order to adequately take into account the nature of the financial instrument, trading venues should calibrate circuit breakers at least

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

at the level of a class of financial instrument, and where necessary, at a more granular level taking into account, in a combined manner, the other parameters described below. For this purpose, classes of financial instruments should be:

- for non-equity financial instruments, at the level of the asset classes as defined in Annex III on RTS 2[3] on non-equity transparency (i.e. bonds, structured finance products, securitised derivatives, interest rate derivatives, equity derivatives, commodity derivatives, foreign exchange derivatives, credit derivatives, derivatives referred to in point 10 of Section C of Annex I of MiFID II, financial contracts for differences and emission allowances); and,

- for equity instruments at the level of the classes of financial instruments described in Table 2 of Annex III of RTS 1[4] on equity transparency under the field "MiFIR identifiers" (i.e. shares, depositary receipts, exchange traded funds, certificates and other equity-like financial instruments).

- **The liquidity profile and the quotation level of the financial instrument:** trading venues should calibrate their circuit breakers taking into consideration the liquidity of the financial instrument, the existence of clear liquidity patterns as well as possible changes in liquidity due to pre-set events such as new issuances or expected corporate actions.

  Trading venues should in particular have tighter parameters for instruments considered to be liquid. The calibration should accommodate subscription rights and instruments with low quotation levels by allowing broader parameters.

- **The volatility profile of the financial instrument:** the calibration of circuit breakers should be supported by a statistical study taking into consideration past volatility with the aim to enable trading venues to infer future volatility.

  Trading venues may take into consideration metrics such as the overnight volatility of the financial instrument, the absolute maximum intraday deviation and the expected frequency of activation of the mechanism.

- **The order imbalance:** trading venues should identify circumstances where significant order imbalances or exceptional circumstances require the circuit breakers' parameters to be re-calibrated. Where appropriate, trading venues should be able to manually re-calibrate

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[3] 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. 229–349).

[4] Commission Delegated Regulation (EU) 2017/587 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 shares, depositary receipts, exchange-traded funds, certificates and other similar financial instruments and on transaction execution obligations in respect of certain shares on a trading venue or by a systematic internaliser (OJ L 87, 31.3.2017, p. 387–410).

their parameters following a pre-defined procedure and with the objective of minimising the duration of the trading interruption.

- **Trading venue mode and rules:** trading venues should have tighter circuit breaker parameters for continuous auction and quote driven systems. Trading venues may calibrate volatility parameters differently depending on the trading phase.

- **Internal references:** circuit breakers should be calibrated using static (such as opening price, closing price or intraday auction price) and dynamic (such as the last traded price or the average price over a certain period) reference price unless the trading venue can demonstrate to its national competent authority that volatility is adequately managed with only static or dynamic thresholds.

- **External references:** trading venues should, when calibrating volatility parameters, consider but not necessarily replicate, the statistical correlation between instruments, in particular, in cross-asset (e.g. cash and future instrument) and cross-market (e.g. multi-listed instrument) situations and the mechanisms to manage volatility in the markets where those instruments are traded. For trading venues operating price referenced trading facilities, the valid reference should be the primary market or the most relevant market in terms of liquidity as referred to in Article 4(1) of Regulation (EU) No 600/2014[5]. For these purposes, trading venues may use free public information on the financial instruments and trading venues which they consider relevant.

- **Duration of the halts:** trading venues may follow a flexible approach when deciding the time length of the volatility interruptions and introduce a certain degree of randomisation on the duration of a specific halt in trading. In this case, trading venues should set and communicate to their members and participants the minimum and maximum time period expected for resuming trading after an interruption.

- **Newly issued instruments:** trading venues should calibrate volatility parameters through estimates taking into account a peer comparison of similar financial instruments with an expected similar liquidity pattern based on expected market capitalisation, industrial sector or issuance size.

13. When calibrating their circuit breakers, trading venues should take into consideration the number of times the mechanism was used in the previous years on their platforms.

5.2 External communications upon triggering of trading halts

14. Trading venues should immediately make public through the means regularly used to make available pre- and post-trade information the activation of a trading halt (that should be differentiated clearly from suspensions of trading foreseen under Articles 32, 52 and

[5] 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 (OJ L 173, 12.6.2014, p.84).

69(2)(m) of MiFID II), the type of trading halt, the trading phase in which it was triggered, the extension of the halt and the end of the halt.