

In case of discrepancies between the French and the English text, the French text shall prevail.

Luxembourg, 22 August 2017

To all the regulated markets, market operators, credit institutions, investment firms and market operators operating an MTF or an OTF

CIRCULAR CSSF 17/668
as amended by Circular CSSF 18/691

Re: ESMA Guidelines on calibration of circuit breakers and publication of trading halts under Directive 2014/65/EU on markets in financial instruments (“MiFID II”) and details on reporting of circuit breakers’ parameters

Ladies and Gentlemen,

This circular transposes the ESMA Guidelines on calibration of circuit breakers and publication of trading halts under Article 48(5) of MiFID II into Luxembourg law and specifies the reporting obligation under the second subparagraph of Article 48(5) of MiFID II. This provision requires regulated markets to report the parameters for halting trading and any material changes to those parameters to the competent authority. In accordance with Article 18(5) of MiFID II, said Article 48 of MiFID II also applies to operators operating an MTF or an OTF.

1. Guidelines

The purpose of the 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 of Article 48(5) of MiFID II. The guidelines provide a non-exhaustive list of elements to be taken into account by trading venues when calibrating the volatility parameters necessary for the circuit breakers and specify the publication to be made by trading venues in case of trading halts under Article 48(5) of MiFID II.

The guidelines are attached to this circular as Annex A and are available on ESMA’s website <http://www.esma.europa.eu>.

2. Reporting of circuit breakers' parameters

In accordance with the second subparagraph of Article 48(5) of MiFID II, trading venues shall report to the competent authority the circuit breakers' parameters and any material changes to those parameters. The trading venues under the CSSF's supervision are required to submit a report by 15 January every year (and the first report by 15 June 2018) on the circuit breakers' parameters used on the first trading day of the current year. Any material change made to these parameters in the course of the year, shall be reported to the CSSF as soon as possible.

For the purpose of this annual reporting, as well as for the reporting of material changes to the parameters, trading venues shall use the form "Template for reporting trading halt parameters to ESMA" provided by the procedure "Reporting of circuit breakers' parameters by NCAs to ESMA – Procedure/Policy (Ref.: ESMA70-156-181)" published on 19 December 2017 by ESMA. By filling in the template, trading venues shall ensure that the information in the section "Reporting of circuit breakers' parameters from NCAs to ESMA" of the procedure is covered in the template. An electronic version of the form is available on the CSSF [website](#). Trading venues shall send the final report to: MAF@cssf.lu.

The procedure is attached to this circular as Annex B and is available on ESMA's website <http://www.esma.europa.eu>.

This circular enters into force on the day of its publication. Trading venues shall apply the provisions of this circular as of 3 January 2018.

Yours faithfully,

COMMISSION DE SURVEILLANCE DU SECTEUR FINANCIER

Jean-Pierre FABER
Directeur

Simone DELCOURT
Directeur

Claude MARX
Directeur général

Annexes:

Annex A: Guidelines on the calibration of circuit breakers and publication of trading halts under MiFID II (Ref.: ESMA70-872942901-63)

Annex B: Procedure: Reporting of circuit breakers' parameters by NCAs to ESMA (Ref.: ESMA70-156-181)



European Securities and
Markets Authority

Guidelines

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

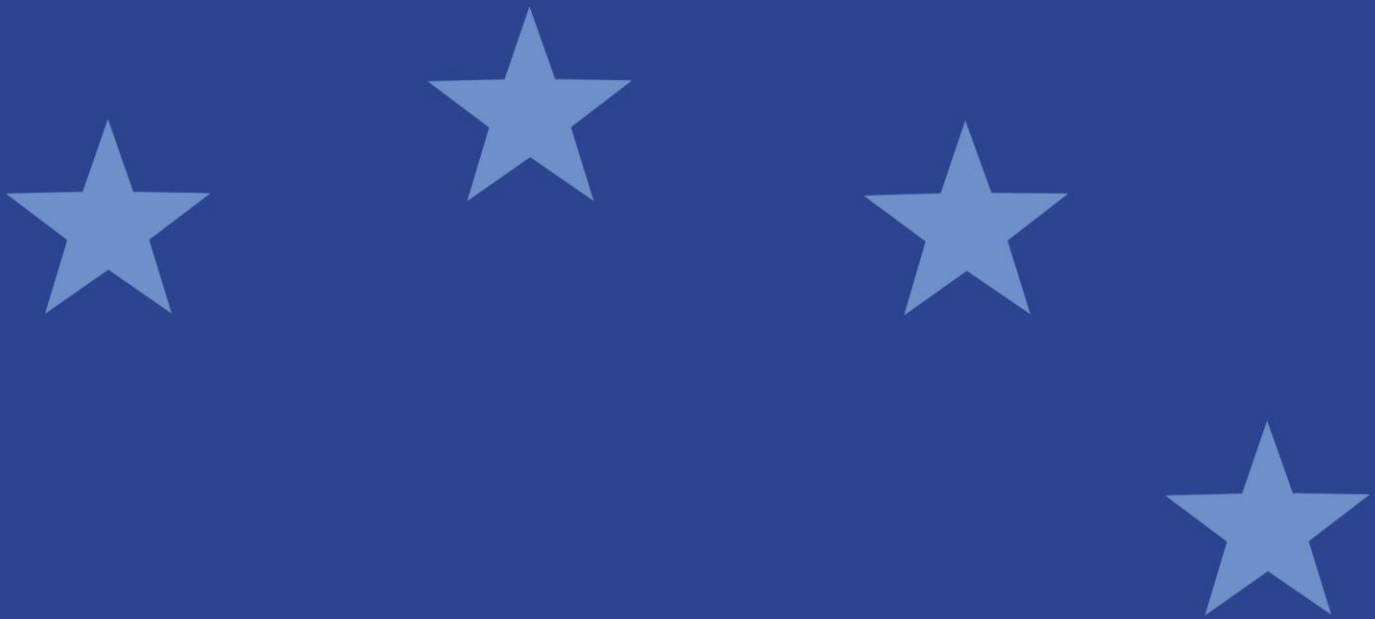


Table of Contents

1	Scope	3
2	Definitions	4
3	Purpose	5
4	Compliance and reporting obligations	6
4.1	Status of the guidelines	6
4.2	Reporting requirements	6
5	Guidelines on Article 48(5) of MiFID II.....	6
5.1	Calibration of volatility parameters	6
5.2	External communications upon triggering of trading halts	8

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 2³ 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 1⁴ 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

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 600/2014⁵. 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.



European Securities and
Markets Authority

Reporting of circuit breakers' parameters by NCAs to ESMA

Procedure / Policy

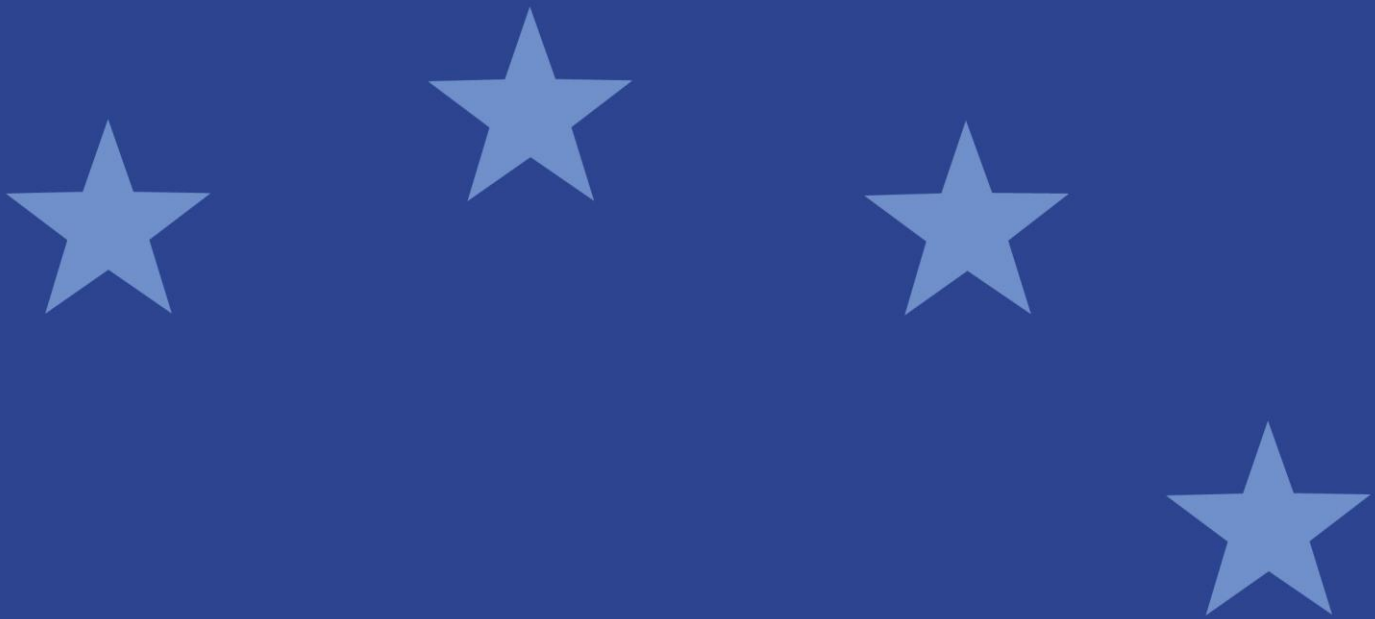


Table of Contents

Introduction	3
Purpose and scope	3
Legal basis	3
Definitions	5
Reporting of circuit breakers' parameters from NCAs to ESMA	6
Template for reporting trading halt parameters to ESMA	8
Procedure steps	11
Awareness campaign	12
Data protection	12
Records	12
Final provisions	12

Introduction

The second paragraph of Article 48(5) of Directive 2014/65/EU (MiFID II) determines that trading venues shall report the parameters for halting trading and any material changes to those parameters to their national competent authority (NCA) in a consistent and comparable manner, and that the NCA shall in turn report them to ESMA.

The Guidelines on the calibration of circuit breakers and publication of trading halts under MiFID II (ESMA70-872942901-63) were published by ESMA on 6 April 2017. These Guidelines apply to trading venues that allow or enable algorithmic trading on their systems and to NCAs.

The Final Report to the aforementioned Guidelines established the template and procedure for the submission of the parameters of mechanisms to halt or constrain trading. It has been decided though not to include these reporting standards and procedure into the Guidelines and rather have them in an ESMA procedure to be approved by the Board. ESMA took advantage of the Consultation Paper for the Guidelines to consult on those reporting standards and procedures and they were broadly supported by respondents.

This document formalises a common standard and procedure for NCAs to adhere to in reporting the parameters to halt or constrain trading used by the trading venues under their jurisdiction to ESMA, without prejudice to the possibility for NCAs to require those trading venues to report to them the parameters using a different and, where appropriate, more granular format.

These common reporting standards aim to ensure consistency and comparability of the reported parameters.

The intended recipients of this document are NCAs.

Purpose and scope

This document sets out a procedure and a harmonised format to be used by NCAs in reporting the parameters to halt or constrain trading used by the trading venues under their jurisdiction to ESMA.

Legal basis

Article 48(5) of MiFID II provides that “*Member States shall require a regulated market to be able to temporarily halt or constrain trading if there is a significant price movement in a financial instrument on that market or a related market during a short period and, in exceptional cases, to be able to cancel, vary or correct any transaction*”.

The second paragraph of Article 48(5) of MiFID II establishes that “*Member States shall ensure that a regulated market reports the parameters for halting trading and any material changes to*



those parameters to the competent authority in a consistent and comparable manner, and that the competent authority shall in turn report them to ESMA”.

Whereas there is no legal mandate to determine the format of those reports, it is necessary to specify the format of those submissions to ensure consistency and comparability of those notifications.

Definitions

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	<p>Trading halts include the following types of mechanisms:</p> <ul style="list-style-type: none">• Mechanisms that interrupt continuous trading, including:<ul style="list-style-type: none">○ 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.
NCA	National Competent Authority, or the authority designated by each Member State in accordance with Article 67 of MiFID II
CDR	Commission Delegated Regulation
SMSC	Secondary Markets Standing Committee
BoS	Board of Supervisors
ESMA Regulation	Regulation (EU) No 1095/2010 establishing a European Supervisory Authority (European Securities Markets Authority)

Reporting of circuit breakers' parameters from NCAs to ESMA

In accordance with the second paragraph of Article 48(5) of MiFID II, NCAs shall communicate the parameters for halting or constraining trading (and any changes to those parameters) used by the trading venues under their jurisdiction to ESMA at least annually and in accordance with the predefined reporting template below.

In particular, NCAs should ensure that the following items are covered in their report to ESMA:

- **Instrument or class of financial instrument:** Reports should describe the parameters for each class of financial instruments based on the CIF code (ISO 10962) where the same parameters are used. Reports should only be provided on a per instrument basis where a report at a less granular level would be inappropriate.
- **General description of the volatility mechanism:** Information should be provided about the types of mechanisms applied in the trading venues' trading systems and a general description of how the mechanisms operate.
- **Dynamic / static:** It should be specified whether the trading venue for which a report is submitted uses a static (opening price, closing price, intraday reference or other) or dynamic (last traded price, potential execution price or other) reference price.
- **Reference price:** Reports should describe the reference price that activates the mechanism of management volatility. Where an external reference price is used (e.g. reference price from other trading venue trading the same instrument or other), this should be flagged in the report.
- **Thresholds:** Both the lower limits and upper limits (if at all) for activation of trading halts should be reported. The limits should be expressed in percentage (e.g. a variation of +/- 5% from the reference price).
- **Frequency of updates:** Where the mechanism used by trading venues is subject to regular updates, the report should include the frequency of those updates (intra-day, inter-day, weekly, monthly...).
- **Duration of the halts:** Where an automatic trading halt remains in effect for a pre-set amount of time, this information should be provided in the report, including the randomisation parameters.
- **Mechanism employed in resuming the market:** Reports should include a description of mechanism used to resume trading. In particular, where a continuous trading session is interrupted through a trading halt and the resumption of the market occurs through

an auction process, the details of such a mechanism (e.g. duration, randomised or not, etc.) should be provided.

More detailed guidance can be found in the template itself, where specific data validation rules have been embedded and all fields benefit from an explanatory note.

NCAAs should ensure that trading venues submit a report to them by 15 January every year (however, the first report should be submitted by 15 June 2018), on the parameters being used to halt or constrain trading at the first trading day of a year, so as to enable verification and update of the data held by the NCAAs and ESMA. Trading venues should, during the course of the year, send an update if they introduce material changes to any of the parameters mentioned above.

Changes limited to adjustments of the thresholds used should not be considered as material for this purpose and new reports should only be sent in case of amendments which significantly affect the functioning and overall structure of the mechanism in place.

Template for reporting trading halt parameters to ESMA¹

VH Identification variables (levels)								VH Information variables																						
Operating MIC code	Market segment MIC code	Trading venue	Market type	Class of financial instruments	Specific instruments	Trading period	Trading period (if Other)	Other relevant details	Type of trading system	General description of the mechanisms	In which market direction(s) can a trading halt be triggered?	Static reference price(s) used(*)	Static threshold(*)	Dynamic reference price(s) used(*)	Dynamic threshold(*)	Absolute thresholds, only if price variations cannot be expressed as percentage of a reference price (*)	Any other trigger mechanisms(*)	Frequency of updates	Frequency of updates (if Other)	Thresholds disclosed	Mechanism to extend volatility interruption	VH mechanisms for periods of unusual market conditions	For each threshold, minimum duration in seconds (with out extensions)	For each threshold, maximum duration in seconds (with out extensions)	Possibility for trading to be suspended for the rest of the day?	Mechanism to resume trading	Mechanism to resume trading (if Other)	Number of times the VH mechanism was triggered over the last year	Other relevant information	
ABCD	ABC1	The ABC D Stock Exchange	Cash	ESXX UX	All ordinary shares with fixed rate income	Other	Trading period other than those provided in the list ...		For example Millennium Exchange	Please elaborate	Both	Report as many as there are in place (e.g. last auction price)	2.5	Report as many as there are in place (e.g. last trade price)	1.25	For example, a VH mechanism triggered for a price absolute variation of EUR 0.10	For example, a derivative halted because the underlying is halted	Daily	Frequency other than those provided in the list...	Yes	For example, first extension automatic following ones triggered manually	For example, special mechanisms for periods of high volatilities	120	150	No	Auction	Mechanism other than those provided in the list...	9999	9999	
ABCD	ABC1	The ABC D Stock Exchange	Cash	ESXX UX	All ordinary shares with fixed rate income	Auction	Trading period other than those provided in the list ...		For example Millennium Exchange	Please elaborate	Both	Report as many as there are in place	5	Report as many as there are in place	2.5	For example, a VH mechanism triggered for a price	For example, a derivative halted because the underlying is halted	Daily	Frequency other than those provided in the list...	Yes	For example, first extension automatic following	For example, special mechanisms for periods of high	240	300	No	Auction	Mechanism other than those provided in the list...	1234	56789	

¹ Downloadable version available in https://www.esma.europa.eu/sites/default/files/library/template_trading_halt_parameters_0.xlsx

							provided in the list ...					(e.g. last auction price)		(e.g. last trade price)		absolute variation of EUR 0.10			the list...		ones triggered manually	volatilities										
ABCD	ABC2	The ABC D Stock Exchange	Derivatives	XXXXXX	ALL	Continuous	Trading period other than those provided in the list ...		For example Millennium Exchange	Please elaborate	Downward	Report as many as there are in place (e.g. last auction price)	3.25	Report as many as there are in place (e.g. last trade price)	1.625	For example, a VH mechanism triggered for a price absolute variation of EUR 0.10	For example, a derivative halted because the underlying is halted	Monthly	Frequency other than those provided in the list...	No	For example, first extension automatic following ones triggered manually	For example, special mechanisms for periods of high volatilities	156	216	Yes	None	Mechanism other than those provided in the list...	654123				
ABCD	ABC2	The ABC D Stock Exchange	Derivatives	XXXXXX	ALL	Auction	Trading period other than those provided in the list ...		For example Millennium Exchange	Please elaborate	Downward	Report as many as there are in place (e.g. last auction price)	2	Report as many as there are in place (e.g. last trade price)	1	For example, a VH mechanism triggered for a price absolute variation of EUR 0.10	For example, a derivative halted because the underlying is halted	Monthly	Frequency other than those provided in the list...	No	For example, first extension automatic following ones triggered manually	For example, special mechanisms for periods of high volatilities	96	156	Yes	None	Mechanism other than those provided in the list...	123456				
ABCD	ABC3	The ABC D Stock Exchange	Cash	CEXXX	ETFs	Continuous	Trading period other than those provided in the list ...		For example Millennium Exchange	Please elaborate	Upward	Report as many as there are in place (e.g. last auction price)	8	Report as many as there are in place (e.g. last trade price)	4	For example, a VH mechanism triggered for a price absolute variation of EUR 0.10	For example, a derivative halted because the underlying is halted	Continuous	Frequency other than those provided in the list...	No	For example, first extension automatic following ones triggered manually	For example, special mechanisms for periods of high volatilities	384	444	No	Auction	Mechanism other than those provided in the list...	4578				

ABC D	ABC C3	The ABC D Stock Exchange	Cash	CEX XXX	ETFs	Auction	Trading period other than those provided in the list ...		For example Mille nnium Exchange	Please elaborate	Upward	Report as many as there are in place (e.g. last auction price)	6	Report as many as there are in place (e.g. last trade price)	3	For example, a VH mechanism triggered for a price absolute variation of EUR 0.10	For example, a derivative halted because the underlying is halted	Continuous	Frequency other than those provided in the list...	No	For example, first extension automatic , following ones triggered manually	For example, special mechanisms for periods of high volatilities	288	348	No	Auction	Mechanism other than those provided in the list...	3215
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Procedure steps

<i>Step</i>	<i>Action</i>	<i>Responsibility</i>
1	<p>By 15 January of every year, trading venues must report to their NCA the parameters used to halt or constrain trading at the first trading day of a year. The first report is expected to be provided by 15 June 2018.</p> <p>NCA's may require the trading venues under their jurisdictions to report these parameters using a different, and, where appropriate, more granular format.</p> <p>Trading venues should, in the course of the year, send an update if they introduce material changes to any of the parameters mentioned above.</p> <p>Changes limited to adjustments of the thresholds used should not be considered as material for this purpose and new reports should only be sent in case of amendments which significantly affect the functioning and overall structure of the mechanism in place.</p>	Trading venues
2	<p>The recipient NCA's should use the pro-forma template to transcribe the information obtained from their trading venues under Step 1, and forward this information by email to ESMA without delay after verifying the data provided by the trading venue and no later than 30 January (no later than 30 June 2018 for the first report).</p> <p>Where, during the course of the year, a trading venue informs its NCA about a material change to its parameters, the NCA should pass this information on to ESMA without delay after verifying the data provided by the trading venue and no later than two weeks after receiving the data from the trading venue.</p>	NCA's



Awareness campaign

Process to be published on the ESMA website.

Data protection

No data from natural persons is to be processed or published.

Records

Electronic copies of the documents provided to be stored by ESMA.

Final provisions

This document shall enter into force on the day following that of its publication on the ESMA website.