



European Securities and  
Markets Authority

# Final Report

**Guidelines on the calibration of circuit breakers and the publication and reporting of trading halts under MiFID II**





European Securities and  
Markets Authority

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## Acronyms used

CP	Consultation paper on Guidelines on the calibration, publication and reporting of trading halts (ESMA/2016/1440)
ESMA Regulation	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
MiFID or MiFID I	Markets in Financial Instruments Directive – Directive 2004/39/EC of the European Parliament and the Council
MiFID II	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
MiFIR	Regulation (EU) No 600/2014 of the European Parliament and of the Council on markets in financial instruments and amending Regulation (EU) No 648/2012
NCA	National Competent Authority
RTS	Regulatory Technical Standards
RTS 1	Commission Delegated Regulation (EU) 2017/587 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
RTS 2	Commission Delegated Regulation (EU) 2017/583 on transparency requirements for trading venues and investment firms in respect of bonds, structured finance products, emission allowances and derivatives



RTS 7	Commission Delegated Regulation (EU) 2017/584 specifying organisational requirements of trading venues
VH	Volatility halt

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# 1 Executive Summary

## Reasons for publication

Article 48(5) of Directive 2014/65/EU (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”. Under Article 48(13), ESMA is mandated to develop Guidelines on the calibration of those trading halts. ESMA has decided to expand the Guidelines at its own initiative to other mechanisms to manage volatility.

Market participants need to monitor market conditions in the markets which halt trading due to excessive volatility. In that context, ESMA considers it necessary to issue Guidelines at its own initiative on how trading halts should be communicated.

Finally, 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”. In order to ensure consistency and comparability of those reports, ESMA is specifying the format of those submissions.

## Contents

This final report sets out the feedback statement to the consultation paper (CP) on Guidelines on the calibration, publication and reporting of trading halts (ESMA/2016/1440). It describes how the responses to the consultation were taken into consideration when drafting the final Guidelines. It describes any material changes to the Guidelines and explains the reasons for this in light of the feedback received.

In particular, this final report focuses on the feedback received on (i) the calibration of mechanisms to manage volatility (section 2.1), (ii) the dissemination of information regarding the activation of mechanisms to manage volatility on a specific trading venue (section 2.2) and (iii) the procedure and format to submit the reports on trading halts’ parameters from National Competent Authorities (NCAs) to ESMA (section 2.3).

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This final report does not include general background information which was already provided in the consultation paper (ESMA/2016/1440). It is therefore recommended to read the two papers together.

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## 2 Feedback statement

1. ESMA received 19 responses to the CP. Responses were received from exchanges (14 responses from regulated markets, multilateral trading facilities or related associations), one law firm, one academic and three associations representing respectively trading firms and asset management companies.
2. This section provides a summary of the responses to the CP and ESMA's view on those responses.

### 2.1 Calibration of volatility parameters

#### **General remarks on the scope of the Guidelines**

##### *Article 48(5) of MiFID II: the concept of trading halt and other mechanisms to constrain trading*

3. Article 48(5) requires trading venues to have in place mechanisms 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”. ESMA notes that, while Article 48(13) of MiFID II specifically refers to “trading halts”, this concept is not explicitly defined in Level 1 and, therefore, is subject to different interpretations.
4. Some respondents challenged ESMA's interpretation of the concept of ‘trading halt’ and also considered that the Guidelines proposed would benefit from further differentiation between the different mechanisms available to trading venues to handle volatility episodes and in particular between volatility interruption mechanisms (mechanism whereby, under certain volatility conditions, continuous trading switches to auction mode with the objective of addressing temporary liquidity imbalances while protecting price discovery) and “pure” trading halts (where the execution of trades and price determination are suspended for no pre-defined duration and that may imply human judgement). Several respondents stressed that those two mechanisms are fundamentally different and should be treated differently in the Guidelines. Some respondents also pointed out that the ESMA's mandate under Article 48(13) of MiFID specifically refers to “trading halts” and, therefore, the scope of Guidelines should only be limited to a very specific set of mechanisms.
5. While acknowledging the comments made, ESMA remains of the view that the following types of circuit breakers should be covered under the concept of ‘trading halts’ :
  - o 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. That 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<sup>1</sup> or unscheduled call auctions in case of price divergence with respect to a pre-defined reference price at the end of the auction<sup>2</sup>.
6. Article 48(5)<sup>3</sup> does not specify which mechanisms should be used in practice and venues, under the supervision of their NCAs, have discretion to set in place the mechanisms that are the most appropriate for their systems and for the instruments traded on them.
7. The reference to “mechanisms to constrain trading” in Article 48(5) includes any other mechanisms used to manage volatility episodes. This might encompass, under certain conditions, mechanisms that prevent the execution of orders introduced in the system (not rejected) such as mechanisms whereby the execution of an order is constrained by price collars pre-set by the venue (e.g. by postponing the execution of a portion of an order beyond the price limits).
8. While these constrictions cannot be considered as ‘trading halts’, they may fulfil the requirements to constrain trading under Article 48(5) in particular where combined with mechanisms whereby trading switches from continuous trading to a call auction following the introduction of an order that would result in a trade outside the static price ranges pre-determined by the trading venue. This should apply unless the trading venue can demonstrate to its NCA that on the basis of either static or dynamic thresholds, volatility can be adequately managed.

### *The scope of the Guidelines*

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<sup>1</sup> Scheduled call auctions would be opening, closing and intraday auctions.

<sup>2</sup> A different case would be that at the end of a call auction there were outstanding (not matched) volumes. These auctions would be out of the scope of the Guidelines.

<sup>3</sup> See as well Article 19 of RTS 7.

9. ESMA understands that, under current market practices, trading venues actually use a wide range of mechanisms adapted to their specific needs either to halt or to constrain trading. While ESMA understands that those mechanisms are different in practice and might impact trading in a different manner, it does not agree with respondents that those mechanisms are, from a calibration perspective, fundamentally different. ESMA considers that those mechanisms covered under Article 48(5) should follow similar principles applicable to their calibration and, taking into account the flexible approach followed in these Guidelines, ESMA believes that the guidance and general principles provided could be applied indifferently to all Article 48(5) mechanisms.
10. ESMA is also mindful of the fact that limiting the application of the Guidelines to only a specific subset of the mechanisms that can be set in place by trading venues under Article 48(5), may create a regulatory incentive for trading venues not to set in place those specific mechanisms (to avoid being subject to the Guidelines). Trading venues may use instead mechanisms that would be outside the scope of Guidelines.
11. In addition, ESMA would like to clarify that, in accordance with Article 16 of Regulation (EU) 1095/2010<sup>4</sup>, it can propose Guidelines at its own initiative with a view to establishing consistent, efficient and effective supervisory practices and to ensure common, uniform and consistent application of Union Law.
12. Therefore, ESMA has decided not to restrict its Guidelines to only some specific types of circuit breakers but to include all mechanisms that trading venues could potentially set in place in accordance with Article 48(5) of MiFID including:
  - Trading halts:
    - 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

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<sup>4</sup> 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 Decision No 716/2009/EC and repealing Commission Decision 2009/77/EC.

trade outside the static price ranges pre-determined by the trading venue;

- mechanisms that extend the period of scheduled<sup>5</sup> or unscheduled call auctions in the case of price divergence with respect to a pre-defined reference price at the end of the auction<sup>6</sup>; and,
    - Mechanisms to constrain trading: any other mechanisms used to manage volatility episodes including, under certain conditions, mechanisms preventing (but not rejecting) the execution of orders introduced in the system such as mechanisms whereby the execution of an order is constrained by price collars pre-set by the venue (e.g. by postponing the execution of a portion of an order beyond the price limits).
13. In particular, mechanisms to constrain trading as defined above should be distinguished from those prescribed under Article 48(4) whereby orders should be rejected when they exceed pre-determined volume and price thresholds or are clearly erroneous. Those mechanisms are not covered within the scope of the Guidelines.
14. Although the requirements introduced in paragraphs (4) and (5) of Article 48 are indeed both aiming at achieving the general objectives set out in Article 48(1) those specific requirements remain different in content and immediate objective.
15. Trading venues should be able to demonstrate compliance with both paragraphs.

Scope of the Guidelines: request-for-quote and auctions

16. Some respondents suggested limiting the scope to certain types of trading systems and to exclude from the scope of Article 48(5) of MiFID II systems where, in their view, trading halts are not meaningful such as auctions (opening auction in particular) and Request for Quotes (RFQ) systems.
17. Regarding the reduction of the scope with respect to auctions, ESMA remains of the view that the extension of call auctions due to a price divergence with a pre-determined

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<sup>5</sup> Scheduled call auctions would be opening, closing and intraday auctions.

<sup>6</sup> A different case would be that at the end of a call auction there were outstanding (not matched) volumes. This situation would be out of the scope of the Guidelines since they are based on a significant price movement over a short period of time according to Article 48(5) of MiFID II.

reference price at the end of the auction period should be considered within the scope of trading halts and therefore subject to these Guidelines.

18. With regard to RFQ, respondents pointed out that: (i) RFQ systems are usually used for illiquid instruments, (ii) RFQ systems<sup>7</sup> are already, by nature, less sensitive to volatility events (in particular due to the fact that there are no resting orders or that each RFQ is separately initiated and all responsive quotes are evaluated independently of other buying or selling interests), (iii) those trading systems lack appropriate reference prices that can be used to set out the parameters of trading halts. Some respondents also recommended removing from the scope of the Guidelines illiquid instruments and non-linear options.
19. Recital (5) of RTS 7<sup>8</sup> already recognises the specific characteristics of RFQ systems. ESMA agrees that all types of circuit breakers may not be appropriate for such systems, but also remarks that RFQ systems which allow or enable algorithmic trading remain subject to the Article 48(5) requirement to have mechanisms in place to halt or constrain trading in case of a significant price movement according to their own specific characteristics.

*Scope of the Guidelines: illiquid instruments and non-linear options*

20. Some respondents to the CP recommended removing from the scope of the Guidelines illiquid instruments and non-linear options. ESMA considers that the Guidelines are sufficiently flexible to accommodate the specific needs of those financial instruments prescribing, in particular, to calibrate the mechanisms taking into consideration the nature, liquidity and volatility profiles of the financial instrument. ESMA also wants to highlight that the requirements set out in these Guidelines are applicable only to trading venues' systems enabling or allowing algorithmic trading whose systems are arguably not used for many illiquid instruments.

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<sup>7</sup> RFQ systems are defined under Commission Delegated Regulation (EU) 2017/587 (RTS 1) & Commission Delegated Regulation (EU) 2017/583 (RTS 2) as "a trading system where a quote or quotes are provided in response to a request for a quote submitted by one or more other members or participants. The quote is executable exclusively by the requesting member or market participant. The requesting member or participant may conclude a transaction by accepting the quote or quotes provided to it on request".

<sup>8</sup> Commission Delegated Regulation (EU) 2017/584 of 14 July 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council with regard to regulatory technical standards specifying organisational requirements of trading venues (OJ L 87, 31.3.2017, p. 350–367).

**General remarks on the obligations under Article 48(5): Ability to halt or constrain trading in case of a significant price movement in a related market and market-wide responses**

21. Almost all trading venues that provided responses expressed concerns about two provisions introduced by Article 48(5) of MiFID II: the possibility of an EU-wide trading halt being triggered following a halt in trading in another market as well as the ability to halt or constrain trading in case of a significant price movement in a related market. These respondents noted that in the case of EU-wide halts for instruments traded also outside the EU, the EU venues would be prejudiced vis-à-vis their non-EU competitors.
22. While ESMA appreciates the concerns raised, it notes that those issues are related to the policy decision made the Level 1 text and, therefore, are outside the scope of the proposed Guidelines. This being said, ESMA believes it is necessary to provide certain clarifications on these requirements.

**Ability to halt or constrain trading in case of a significant price movement in a related market**

23. The first paragraph of Article 48(5) determines the obligation of trading venues to be able to halt trading but not to necessarily halt trading in each and every case where there is a significant price movement in a related market. MiFID II does not specify the concept of 'related markets' or circumstances under which a trading venue should halt trading on the basis of the volatility observed in another market.
24. Respondents highlighted:
- the challenges in monitoring the trading activity in all the markets where the same instrument is traded (in particular data cost issues); and,
  - the majority of trading halts are venue-specific, for instance, local liquidity imbalances which do not require any type of follow-up action in other venues where the same instrument is traded.
25. ESMA agrees with these views, and notes that trading venues should exercise judgement with respect to which trading venues should be monitored and also with respect to the price movements in a related market that would require a trading halt on their own venue.

**Coordination of a market-wide response following a trading halt in the most relevant market in terms of liquidity**

26. The second paragraph of Article 48(5) provides for a coordination mechanism which in its most extreme case would lead to a trading halt of the same instrument on other venues. This mechanism is subject to NCAs prior assessment and agreement.
27. ESMA notes that such a situation would, in the most likely scenario, take place as a regulatory suspension under Article 69(2)(m) of MiFID II. As a consequence, and given the implications of such a suspension, the decision of the regulators would be based on a wider array of factors rather than just the existence of a trading halt in the most relevant market in terms of liquidity.
28. Member States and NCAs may determine the approach to be followed in this respect (i.e. which mechanism and under which specific circumstances should a halt in trading on one specific trading venue trigger a coordinated market-wide response). The ESMA Guidelines are without prejudice of the relevant prerogatives of NCAs and in particular their ability to limit the application of this provision to a specific subset of mechanism for which a coordinated response might be relevant.

### **Comments on the general approach and the proposed criteria for the calibration of trading halts**

29. Respondents generally expressed their support for the approach proposed by ESMA in the CP. They welcomed the attempt made by ESMA to establish calibration criteria while maintaining flexibility for trading venues when setting the exact parameters to be used. However, respondents suggested in their answers some adjustments to be made, which are summarised below.
30. Regarding the proposed calibration criteria, the following adjustments were recommended:
  - **General:** Some respondents suggested clarifying that the factors mentioned are not meant to be exhaustive.  
  
ESMA agrees that the purpose of the proposed Guidelines is not to create an exhaustive list of factors but to allow trading venues to take into account the factors that are relevant for them including those not included in the original list. This will be clearly stated in the Guidelines.
  - **Order imbalance:** Some respondents noted that order imbalance is the result of market expectations and is underpinned by fundamental reasons, which do not justify constraining trading.

ESMA considers that even if order imbalance is the result of market expectations, trading venue should take into consideration the level of bids and offers in the order book when considering trading halt calibration. The shape of the order book (order imbalance and depth of the order book), regardless of whether justified by fundamental reasons or not, might have direct impact on the occurrence as well as on the magnitude of stressed market conditions. ESMA considers this to be a relevant criterion to be factored in. Given that the Guidelines afford flexibility to trading venues in terms of the calibration of their trading halts, ESMA does not deem it necessary to change the proposed approach in this respect.

- **External references:** One respondent proposed to use as the external reference not the pricing behaviour of the correlated instrument(s) but the parameters for halting or constraining used by the venue(s) where those correlated instrument(s) are traded. Other respondents stated that external references should only be taken into consideration where the data is available publicly and for free. Respondents also suggested that flexibility be provided to venues to determine which instruments are linked and correlated to those they trade and, therefore, need to be appropriately monitored. Other respondents requested clarification on the interpretation of Article 48(5) of MiFID II regarding the obligation to monitor the activity in other markets.

Regarding the meaning of 'external references', ESMA considers that trading venues' calibration should be based on pre- and post-trade transparency data to statistically determine the expected volatility of an instrument and also on the available information on the instruments to manage volatility in the venues where the same or correlated instrument/s are traded.

As pre- and post-trade data will become free after 15 minutes (Article 13 of MiFIR), ESMA considers it appropriate for trading venues to use this data for statistical analysis purposes in calibrating trading halts. Similarly, trading venues should only take into consideration the publicly available information on mechanisms to manage volatility used by venues where correlated instruments are traded.

With respect to the determination of the specific set of instruments to be considered, ESMA agrees that each trading venue should determine which are the correlated instruments that are relevant for these purposes. ESMA believes that trading venues should monitor the activity and the mechanisms in place on other venues only for those financial instruments that have a meaningful correlation with the instruments traded under their systems or, in the case of multi-listed instruments, only for those venues

that hold a meaningful level of liquidity and that are relevant from a price formation perspective (e.g. most relevant markets in terms of liquidity for equity instruments).

- **Duration of the halt:** Respondents requested clarity around the nature of the Guidelines outlining the randomisation of trading resumption. It should be noted that ESMA's proposal in this respect was not to require mandatory randomisation of trading resumption which should remain discretionary in nature. Respondents should note that the Guidelines state that "trading venues may follow a flexible approach [...] or introduce a certain degree of randomisation on the duration of a specific halt".

Regarding the maximum time length of the halt, other respondents stressed that, in the case of an in-depth investigation by surveillance staff of the trading venue, the maximum time length is not always known in advance. ESMA acknowledges this point and recognises that in some specific cases the duration of the halt could be extended beyond the published maximum period to allow for more in-depth analysis and investigation. This is reflected in the final text of the Guidelines.

- **Newly issued instruments:** Respondents noted that estimates are difficult to implement in practice and suggested that ESMA should consider proposing one-size-fits-all thresholds (e.g. +/- 20%). ESMA recognises that estimates might in certain cases be difficult to implement. However, ESMA does not consider a one-size-fits-all solution appropriate and prefers to maintain an approach whereby the provision of estimates leverages on trading venues' expertise and the knowledge of financial instruments traded on them.

31. Respondents (trading venues in particular) were broadly in agreement with the requirement to monitor the number of times the halting mechanism was activated in the previous year for their own system. Some respondents highlighted the difficulties in undertaking this monitoring exercise for other venues trading the same financial instrument. They also stressed that the activation of volatility mechanisms is dependent on external events and the overall market volatility.

32. ESMA agrees that it may be difficult to compare the number of times that trading halts were triggered between different trading venues and different financial instruments due to the large number of factors to be considered. As a consequence, this parameter has been eliminated from the Guidelines.

33. One respondent highlighted the importance of having transparent and predictable parameters and information on the specific prices that would trigger a halt. In its view, venues should be required to disclose the price band where prices can evolve without being constrained. The importance of allowing participants to send orders cancellations and amendments during a halt was highlighted as participants should not be prohibited to send cancellations and amendments during this time.
34. Under Article 18(4) of RTS 7, a venue should disclose the general policies and arrangements to manage its trading halts. This obligation does not detail the exact thresholds that trigger a trading halt. Accordingly, trading venues may determine the degree of disclosure of these parameters.
35. With respect to the capacity of market participants to send cancellations and amendments during trading halts, ESMA notes that this is not within the scope of these Guidelines.
36. In the CP, ESMA clarified that the calibration of parameters should be completed at a sufficiently granular level. ESMA proposed to use, as a minimum granularity level the classes of financial instruments established for transparency purposes within Commission Delegated Regulation (EU) 2017/587 (RTS 1) & Commission Delegated Regulation (EU) 2017/583 (RTS 2). Respondents did not express specific concerns in this respect but requested that ESMA further clarifies that, where necessary, calibration can be completed on a most granular level (e.g. at an instrument level). ESMA believes this point is reflected in the final drafting of the Guidelines.

#### **Order price and volume collars under Article 48(4) of MiFID II**

37. Article 48(4) mechanisms are defined as pre-trade controls under Article 18 and 20 of RTS 7 and they should be based on price and volume. The trading venues may set up additional pre-trade controls based on different parameters (such as credit risk limits). In the case of price collars, these mechanisms automatically block the introduction of orders that do not meet pre-set price parameters on an order-by-order basis. ESMA consulted on the possibility to set Guidelines on these mechanisms at its own initiative.
38. A majority of respondents, mainly trading venues, were of the view that the Guidelines should not be extended to mechanisms covered under Article 48(4) of MiFID II. Those respondents noted in particular that:
  - Trading venues are best placed to calibrate the thresholds for their markets based upon their experience and knowledge of the liquidity profiles and the broader dynamics

of their markets. They described order rejection mechanisms as highly sensitive to market context and, therefore, should be dynamically set in order to navigate market circumstances at any given time. They did not consider additional guidance to be required, particularly as these mechanisms are already fully integrated into their market model and the information provided at Level 2 in RTS 7 is clear and requires no further guidance.

- Some respondents also pointed out that the ESMA's mandate under Article 48(13) of MiFID II did not extend to order price/volume collars and, therefore, those mechanisms should be not included in the scope of the Guidelines. One respondent went one step beyond noting that Article 48(13) of MiFID II only applies to trading halts and, therefore, volatility interruption mechanisms (i.e. where continuous trading switches to auction mode without any halt) should also be removed from the scope of the Guidelines.

39. Other respondents supported the proposal to also apply the Guidelines to the calibration of mechanisms to reject erroneous orders (i.e. order price/volume collars) except for the duration of the halt Guidelines. They stressed that the thresholds used to reject erroneous orders should be supported by sufficient and timely statistical information, similar to mechanisms to manage volatility. One respondent also suggested clarifying that the thresholds of order rejection mechanisms should be significantly wider than those used for trading halt purposes.

40. On the basis of the limited evidence gathered, ESMA does not consider appropriate at this point in time expanding the scope of the Guidelines to mechanisms covered by Article 48(4) of MiFID II that are meant "to reject orders that exceed pre-determined volume and price thresholds or are clearly erroneous".

### **Prevention of market-wide volatility events**

41. The majority of respondents did not see a need for any regulatory action aiming at preventing potential market-wide volatility events in the Union.

42. One respondent noted that setting up a coordinated mechanism between European trading venues would entail high costs due, in particular, to the cost of monitoring the activity on other trading venues. This respondent suggested a regulatory initiative to reduce or remove the cost for market data feeds used directly between trading venues to facilitate monitoring the activity in related markets.

43. Although ESMA welcomes this proposal, which would also address other concerns expressed with respect to implementation of Article 48(5) of MiFID II, it notes that such an initiative would need to be explicitly consulted upon and, therefore, cannot be included in this set of Guidelines.
44. One respondent proposed to delegate the determination of the volatility thresholds to public authorities and not to trading venues because only the former can have a market-wide perspective with sufficient access to trade details.
45. Lastly, one respondent suggested a more sophisticated system that would better address market-wide volatility events in the Guidelines. This respondent invited ESMA to provide more detailed Guidelines with respect to the general calibration of the dynamic thresholds. In its view, due to the high-speed nature of securities markets, incremental price changes in the same direction within a few milliseconds may lead to market-wide volatility events or a so-called flash crash. These incremental price changes might not necessarily trigger a trading halt if only dynamic thresholds are applied. Therefore, the two following suggestions were made:
- Firstly, dynamic reference prices should not be updated due to partial executions, i.e. the volatility safeguard should check whether a large order (or a fat finger trade) would exceed the dynamic threshold relative to the reference price before the first partial execution takes place and not whether only the respective next partial execution is within the threshold relative to the reference price calculated after each partial execution.
  - Secondly, dynamic and static thresholds should be implemented in combination. As outlined above, several incremental price changes within few milliseconds might be in line with dynamic thresholds and therefore lead to large price jumps without triggering a trading halt.
46. ESMA appreciates the first suggestion and recognises that this point should, in most cases, be taken into consideration by trading venues when calibrating the thresholds for their volatility mechanisms. However, ESMA has opted for a principle based approach in its Guidelines and it would therefore not be appropriate to add such a provision which is linked to one specific volatility mechanisms and cannot be applied across the board. Therefore, this was not introduced in the Guidelines.

47. ESMA has added the second suggestion into the Guidelines noting that dynamic and static thresholds should be set unless the trading venue can demonstrate to its NCA that on the basis of either static or dynamic thresholds, volatility can be adequately managed.

## **2.2 External communications upon triggering a trading halt**

### **Dissemination of information related to circuit breakers and harmonised code “VH”**

48. The majority of the respondents did not agree with the proposal contained in the Guidelines relating to the order and trade feed reporting standard for trading status. However, the bone of contention appeared to be the format proposed by ESMA (i.e. the code “VH”) rather than the general proposal to inform immediately the market when a volatility interruption mechanism has been triggered.

49. The main drawbacks identified by the respondents not supporting the proposal relate to the fact that implementing the referred unified system relating the order and trade feed reporting standard for trading status:

- would invalidate already implemented mechanisms of reporting that are functioning correctly and are adapted to the specifications of the type of trading held in the relevant trading venue;
- would imply a material cost of implementation in particular for trading venues that already have reporting mechanisms in place;
- would be technically difficult to deploy, as there are many differences among those mechanisms, and some trading venues do not use a trade feed that provides a continuous stream of data across all instruments;
- could affect the trading venues ability to adapt their technical facilities to the business needs;
- ignores the distinction between mechanisms halting and constraining trading and the distinction in the underlying mechanisms across trading venues; and
- could generate a delay in MIFID II implementation, as this proposal was not initially planned.

50. With respect to the possible delays such a uniform publication format would imply, one respondent recommended, should ESMA proceed with its proposal, to consider a phased-in implementation providing venues with some time to adapt their systems to the harmonised format.
51. One respondent considered that it is necessary to make public not only the start of a trading halt but also the end. This respondent suggested that only the most liquid markets should report trading halts since this is the relevant piece of information for investors.
52. ESMA appreciates the concerns raised in the responses received and has therefore decided to amend its proposal and will not prescribe any harmonised format for the communication of trading halts to the market.
53. However, ESMA still considers it is appropriate for market participants to be informed immediately when a trading halt is triggered. Such publication should take place through the means regularly used by the trading venue to make available pre- and post-trade information to its users and to the market as a whole. This publicity is not required with respect to mechanisms that only constrain the execution of an order by means of price collars pre-set by the venue.

#### **Granularity of the code**

54. Consistently with the fact that the majority of the respondents disagreed with the proposal to create a harmonised code for signalling trading halts to the market (“VH” code), respondents were, for the same reasons, not in favour of having more granular codes. They stressed that most European trading venues have already implemented processes to disclose this information with a similar (if not higher) level of transparency in real time.
55. Some trading venues, while not supporting the approach proposed in the paper, agreed that the distinction between volatility interruptions occurring during the continuous trading or during auctions and the information relating to the extension of the volatility interruptions are useful.
56. Similarly, two respondents considered that it would be useful to identify the static or dynamic threshold which caused the trading halt.
57. ESMA acknowledges the support for sufficient granularity to be provided by trading venues and, hence, requires them to differentiate clearly (i) trading halts and manual suspensions under Articles 32, 52 and 69(2)(m) of MiFID II, (ii) the type of trading halt that has operated (differentiating in particular between situations when continuous trading is halted from

situations where continuous trading switches to auction mode, including whether an auction was extended due to price divergence) and to identify the trading phase on which the trading halt occurs.

### **Appropriateness of the code “VH”**

58. Respondents reiterated their concerns about the proposed harmonised code “VH”. They stressed that it would be inappropriate to issue Guidelines affecting the format and field level information related to volatility interruptions leading to trading halts that should be disseminated by the trading venues, as the vast majority of trading venues have already implemented technical developments to provide that information (e.g. FIX protocol). In addition, respondents argued that the technical aspects relating to the reporting of the referred information were not under the scope of the mandate granted to ESMA for issuing the Guidelines and that such technical developments would be costly.

59. On the basis of the evidence gathered, ESMA has therefore decided to amend its proposal and will not prescribe any harmonised communication of trading halts to the market.

### **Other comments**

60. One respondent highlighted the need to address the information provided by trading venues in the course of the trading halt (such as indicative prices and volumes) to facilitate resumption of regular trading.

61. ESMA understands that this concern should be addressed by the level 1 and level 2 provisions on auctions.

## **2.3 Reporting of trading halts’ parameters from NCAs to ESMA**

62. A minority of respondents disagreed with the proposal to establish a harmonised format for the reporting of trading halts parameters from NCAs to ESMA. One respondent in particular noted that the requirement proposed by ESMA creates unnecessary and onerous administrative burdens and costs to trading venues without generating significant benefit as information is already publicly available. This respondent also noted that ESMA was not mandated to produce a prescribed reporting mandate.

63. The majority of respondents either explicitly or implicitly agreed with ESMA's proposal to require the use of a prescribed reporting template. Respondents suggested the following amendments to the template:

- One respondent observed that the template was only applicable to cash markets, as concepts such as thresholds do not exist on ETD markets where trading is controlled in a different manner.
- Some respondents noted that there were duplicate columns, such as static price followed by static thresholds, and advised that only one column is necessary. Other respondents requested that the static and dynamic reference price be included in an additional column or to explicitly state that the reference price should be provided within the columns “static thresholds” and “dynamic thresholds”, as information on the width of the threshold is only useful when presented in combination with the respective reference price. Respondents suggest that the dynamic thresholds column includes the option of “leave blank if none”.
- When describing the general mechanism, it is important to identify in which market direction(s) a trading halt can be triggered. Consequently, trading venues should state whether the trading halt is applied only in a downward, only in an upward or in both market directions.
- One respondent noted that for trading halts where the instrument specific calculation of thresholds is based on a computational model, an aggregate reporting of thresholds on an asset class level (as suggested by the template) may be difficult to determine if the thresholds are computed on an individual security level and if they are frequently updated. The respondent requested guidance on how these measures should be aggregated and reported.
- There are also difficulties in reporting for mechanisms which are designed with two different dynamic thresholds (e.g. where one reference price is related to the last trade price and the other price is calculated from an average over a certain period).
- Some respondents stressed that, on item (iv) Reference price, ESMA should consider a scenario where the actual underlying to a derivative is halted and the derivative instrument is halted within same trading venue.
- On item (v) Thresholds, some respondents suggested that an option to provide an absolute value should be allowed. Others noted that the template needs to allow the input of parameters that are set in absolute terms (e.g. Euro cents) in addition to percentage terms. ESMA should specify how an absolute threshold should be converted into a percentage threshold.

- Some respondents noted that the number of times an alert is triggered over the past year is irrelevant since the number is arbitrary and depends on unique/unpredictable circumstances.
  - Clarity was sought as to whether the ESMA template will replace or accompany existing reporting requirements to the NCA.
  - A definition for “fast market” or “period of high volatility” from ESMA would be useful to ensure consistent reporting for such market conditions between trading venues.
64. With respect to the reporting frequency proposed by ESMA in its CP, although many respondents welcomed annual reporting as being an appropriate frequency, several respondents suggested that the reporting should start on the first trading day of a year rather than 1 January.
65. ESMA welcomes the comments made on the proposed template and has taken most of them into consideration. ESMA has therefore developed, on that basis, a new reporting template which is reproduced below for information.
66. ESMA would like to stress that the proposed template only refers to the reports to be sent from NCAs to ESMA as per trading halts and does not preclude the possibility for NCAs to require the trading venues under their jurisdictions to report the parameters using a different, and where appropriate more granular, format. Therefore, considering that the harmonised template is more NCA guidance than industry guidance, ESMA will establish an internal protocol for this purpose as described below:
- In accordance with the second paragraph of Article 48(5) of MiFID II, NCAs shall communicate to ESMA the parameters for halting trading (and any changes to those parameters) used by the trading venues under their jurisdiction 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:** Where possible, reports should describe the parameters at an asset class or sub-asset class level and in particular for classes or sub-classes where the same parameters (but not necessarily the exact same thresholds) 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 type of mechanism which are 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 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.
- NCAs shall ensure that trading venues submit to them, by 15 January every year, a report on the parameters used to halt or constrain trading as the first trading day of January of that year so as to enable verification and update of the data held by the NCAs and ESMA. Trading venues should, during the course of the year, send a new report 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 halts parameters to ESMA

VH Identification variables (levels)					VH Information variables																	
Trading venue	Market type	Class of financial instruments (or instruments if different rules apply)	Trading period (if different rules apply)	<u>Add any other relevant granularity level (e.g. liquidity, price, specific instruments...)</u>	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 thresholds(*)	Dynamic reference Price(s) used(*)	Dynamic threshold(s) (*)	Absolute thresholds, where allowed price variations cannot be expressed as percentage of a reference price(*)	Any other trigger mechanisms (please report detailed description)(*)	Frequency of updates (Intraday, Daily, Monthly, etc...)	Thresholds disclosed (Yes or No)	Mechanism to extend volatility interruption	Do you have VH mechanisms for periods of unusual market conditions (for example, periods of high volatilities)? If yes please describe.	For each thresholds, duration of trading halts (without extensions) (specify the duration for fixed duration and random duration, if applicable)	Possibility for trading to be suspended for the rest of the day? (Yes or No)	Mechanism to resume trading	Number of times the VH mechanism was triggered over the last year	<u>Add any other VH information variable you deem relevant to be reported</u>
Xetra	Cash market	Stocks	Auction		XXX	Please elaborate	Upward, downward, or both	Report as many as there are in place (e.g. last auction price)	To be reported in percentages	Report as many as there are in place (e.g. last trade price)	To be reported in percentages	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	Intraday	No	For example, first extension automatic, the following ones activated manually by the Trading venue	XXX	Fixed: 2min Random: 0s to 30s	Yes / No	Auction	XXX	XXX
Xetra	Cash market	Stocks	Continuous		XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Xetra	Derivatives	Futures	Auction		XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	No	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Xetra	Derivatives	Futures	Continuous		XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	Yes	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Xetra	Cash market	ETFs	Auction		XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX
Xetra	Cash market	ETFs	Continuous		XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX	XXX

\* Please leave blank if not applicable

## 2.4 Cost-benefit analysis

67. With respect to the preliminary cost and benefit analysis presented in annex of the CP, three main comments were raised:

- Respondents agreed that if the approach proposed for the mandatory guidelines is maintained (i.e. leveraging to the extent possible on existing mechanisms and trading venues practices), the costs incurred should be limited.
- Several respondents highlighted issues with respect to the need to monitor statistically related markets. They stressed that such a market wide coordination among different markets would imply high costs for venues. Should this proposal be maintained, respondents would welcome clarification that external reference information should only be sourced where that information is publicly and freely available.
- Some respondents questioned the benefit of displaying, in a harmonised format, through trading data feed, information about trading halts. Respondents noted that this may replicate current practice. In their view, implementing this harmonised format would imply high costs for venues and could ultimately impact on the latency of financial markets.

68. ESMA considers that the changes introduced in the final Guidelines and which are described in more details above should address the main concerns raised with respect to the cost of implementing the Guidelines. In this context, and consistently with Article 16 of Regulation (EU) No 1095/2010<sup>9</sup> (ESMA establishing regulation) which stipulates that the cost and benefit should be “proportionate in relation to the scope, nature and impact of the Guidelines”, ESMA does not consider it necessary to develop a more detailed analysis based on quantitative data for this Guidelines.

69. ESMA would like to stress that, in accordance with Article 16 of Regulation (EU) No 1095/2010, it has requested an opinion from the Securities and Markets Stakeholder Group which provided comments orally and did not raise any other issues beyond those summarised in this report.

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<sup>9</sup> 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

## **3 Annexes**

### **3.1 Annex I: List of CP questions**

**Q1. Would you consider these factors discussed above to be useful? Could you identify any additional element to be factored in?**

**Q2. Do you consider that the Guidelines regarding calibration of volatility parameters should also apply to mechanisms to reject erroneous orders (i.e. order price / volume collars) and that ESMA should propose Guidelines on this issue at its own initiative?**

**Q3. Is there any other aspect which should be considered in these Guidelines so as to prevent market-wide volatility events given the current structure of European markets?**

**Q4. Do you consider that the proposed order and trade feed reporting standard for trading status will contribute to facilitate a correct identification of trading halts across Europe? Do you foresee any drawback on it?**

**Q5. Would you prefer a further degree of granularity in the information provided as described in the text under paragraph 46 and 47? Please elaborate in case you consider necessary further granularity but you disagree with the proposed approach**

**Q6. Is the code proposed above (i.e. "VH") appropriate, or should another code be used? Please elaborate in case you consider that another code should be used**

**Q7. Do you agree with the reporting template proposed?**

**Q8. Are there any other items that should be included in the template?**

**Q9. Please provide any views with respect to the costs and benefits identified in the relevant annex.**

## 3.2 Annex II: MiFID II mandate to issue Guidelines

### Article 48 MiFID II – Systems resilience, circuit breakers and electronic trading

[...]

4. *Member States shall require a regulated market to have in place effective systems, procedures and arrangements to reject orders that exceed pre-determined volume and price thresholds or are clearly erroneous.*

5. *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. Member States shall require a regulated market to ensure that the parameters for halting trading are appropriately calibrated in a way which takes into account the liquidity of different asset classes and sub-classes, the nature of the market model and types of users and is sufficient to avoid significant disruptions to the orderliness of trading.*

*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. Member States shall require that where a regulated market which is material in terms of liquidity in that financial instrument halts trading, in any Member State, that trading venue has the necessary systems and procedures in place to ensure that it will notify competent authorities in order for them to coordinate a market-wide response and determine whether it is appropriate to halt trading on other venues on which the financial instrument is traded until trading resumes on the original market.*

[...]

13. *ESMA shall, by 3 January 2016, develop guidelines on the appropriate calibration of trading halts under paragraph 5, taking into account the factors referred to in that paragraph.*

### 3.3 Annex III: Cost-benefit analysis

Article 16 of Regulation (EU) No 1094/2010 (the ESMA Regulation) requires ESMA, where appropriate, to analyse the potential costs and benefits relating to proposed guidelines. It also states that cost-benefit analyses must be proportionate in relation to the scope, nature and impact of the proposed guidelines.

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”. Under Article 48(13), ESMA is mandated to develop guidelines on the calibration of those trading halts. In order to avoid creating regulatory incentive in favour of one specific mechanism and with a view to establishing consistent, efficient and effective supervisory practices within the Union, and to ensuring the common, uniform and consistent application of Union law, ESMA has decided at its own initiative to broaden the scope of those Guidelines to all mechanisms covered under Article 48(5) of MiFID. In addition, ESMA has considered necessary to develop means to ensure appropriate dissemination of information through the instrument’s data feed regarding the activation of a trading halt mechanism on a specific venue. This will allow market participants to access easily and in real time to relevant information regarding the triggering of volatility mechanisms. Although ESMA has not received an express mandate to clarify the implementing aspects of this obligation, it has the power under Article 16 of the ESMA Regulation to adopt Guidelines to establish consistent supervisory practices and to ensure the common, uniform and consistent application of the Union law. In this respect, ESMA is of the view that the proposed Guidelines on the implementing aspects of the reporting obligation achieve the aforementioned objective.

	Description
Policy Objective	The Guidelines are aimed at providing guidance on (i) the calibration of trading halts as per Article 48(13) and (ii) the dissemination of information regarding the activation of volatility mechanisms on a specific trading venue.
Technical Proposal	The Guidelines provide for:

	<ul style="list-style-type: none"> <li>• Specific parameters to be taken into consideration by trading venues when calibrating their mechanisms to halt trading in case of significant price movements.</li> <li>• Requirements regarding the communication of information to all market participants where trading is halted on a specific venue.</li> </ul>
Benefits	<p>The Guidelines will contribute to ensure appropriate calibration of the volatility mechanisms in the Union and adequate dissemination of information regarding the activation of those volatility mechanisms to all market participants.</p>
<p>Cost to regulator:</p> <ul style="list-style-type: none"> <li>- One-off</li> <li>- On-going</li> </ul>	<p>The Guidelines above should allow Member States and NCAs to fulfil their MiFID II requirements regarding trading halt mechanisms and in particular:</p> <ul style="list-style-type: none"> <li>• Their obligation “to ensure that the parameters for halting trading are appropriately calibrated in a way which takes into account the liquidity of different asset classes and sub-classes, the nature of the market model and types of users and is sufficient to avoid significant disruptions to the orderliness of trading”;</li> <li>• The timely and efficient dissemination of information regarding trading halts.</li> </ul> <p>If NCA might have to dedicate IT resources and incur associated IT compliance costs to be able to comply with these Guidelines, those costs are therefore expected to be minimal and mostly linked to level 1 requirements.</p>
<p>Compliance cost:</p> <ul style="list-style-type: none"> <li>- One-off</li> </ul>	<p>Most of concepts that these Guidelines aims at clarifying are introduced by MiFID II which requires trading venues to have in place mechanisms to halt or constrain trading in case of significant price movement.</p>

<p>- On-going</p>	<p>Therefore, ESMA considers that the possible costs are mostly driven by level 1.</p> <p>In addition, ESMA has tried to leverage to the extent possible on existing market practices and communication channels.</p> <p>For instance, with respect to the Guidelines on the calibration of trading halts' parameters, ESMA has followed an approach leveraging, where possible, on the trading venue's expertise and instrument's knowledge and providing for Guidelines which are sufficiently broad to encompass all types of different mechanisms and practices.</p> <p>In this context, with respect to incremental costs (i.e. costs not directly linked to level 1 provisions), trading venues should incur only minimal one-off and ongoing IT costs.</p>
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