October 2026

Information Paper

Volatility Control Mechanism in Hong Kong's Securities Market

NOTE TO THE READER:

This paper is compiled based on the concluded consultation model and the relevant Rules of the Exchange ("Rules") for the Volatility Control Mechanism (VCM). It aims to facilitate understanding of investors and traders about the VCM mechanism. While due care has been taken to provide accurate and up to date information, the paper is for general reference only and if any discrepancies or inconsistencies with the Rules are found, the meanings in the Rules shall prevail. HKEX and its subsidiaries shall not be responsible or liable for any loss or damage, directly or indirectly, arising from the use of or reliance upon any information provided in this document.

Version Date: 31 October 2026

Table of Contents

1. Background 3
2. Overview of VCM Model 4
3. Instruments Covered under VCM and Triggering Thresholds 5
4. Publication and Maintenance of the List of VCM Securities 7
5. Monitoring Phase of the VCM 7
6. VCM Trigger and Cooling-Off Period 8
7. Determination of the VCM Reference Price 10
8. Quotation Rule and Price Warning During Cooling-off Period 12
9. Additional Market Data Dissemination for VCM 12
10. Trading of Linked Instruments 13
11. Odd Lot / Special Lot Orders and Manual Trades 13
12. Securities Market Making (SMM) and Liquidity Provision 13
13. Enquiries and Others 14

1. Background

VCM is based on the regulatory guidance of the Group of Twenty (G20) and International Organization of Securities Commissions (IOSCO), and is designed to prevent extreme price volatility from trading incidents such as a "flash crash" and algorithm errors, and to address systemic risks from the inter-connectedness of securities and derivatives markets. Many international exchanges have implemented some form of volatility control mechanisms to control extreme price volatility.

In the case of HKEX's VCM, if the potential trade price of an applicable security deviates more than a predefined percentage within a specific time frame, it will trigger a cooling-off period for five minutes. This provides a window allowing market participants to reassess their strategies, if necessary. It also helps to re-establish an orderly market during volatile market situations.

VCM for the securities market was first implemented on 22 Aug 2016 and initially covered all Hang Seng Index (HSI) and Hang Seng China Enterprise Index (HSCEI) constituent stocks only (81 stocks as of July 2016).

In August 2018, further guidance was issued by IOSCO[1], which essentially requires regulated markets to establish suitable volatility controls and to review and calibrate such controls from time to time to ensure that they stay relevant with respect to the latest market development.

Accordingly, HKEX consulted the market in 2019 on a proposal to enhance VCM in the securities market and concluded the following enhancements:

1. Expanding VCM stock coverage to all constituent stocks of Hang Seng Composite (HSCI) LargeCap, MidCap and SmallCap Indexes (a total of nearly 500[2] stocks);

2. Applying a tiered structure of triggering thresholds at ±10%, ±15%, and ±20% against the last automatch traded price 5 minutes ago for the constituent stocks of the three HSCI size indexes respectively; and

3. Allowing multiple triggers per trading session for each VCM stock.

The above enhancements were implemented in two phases. Phase 1 included

[1] IOSCO final report on "Mechanisms Used By Trading Venues To Manage Extreme Volatility And Preserve Orderly Trading" issued on 1 August 2018.

[2] Data as of 15 October 2019.

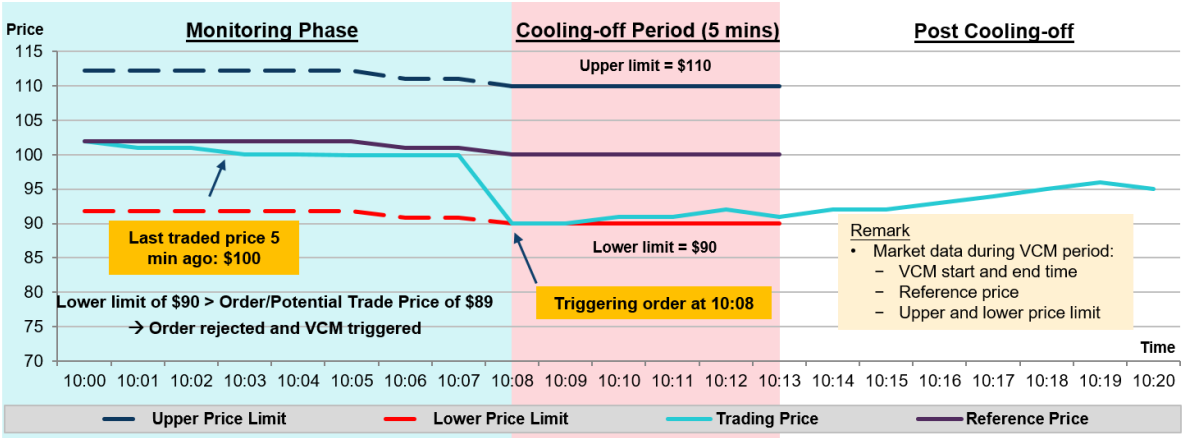
(1) VCM stock coverage expansion and *(2) Adoption of a tiered structure of triggering thresholds*, and was implemented on 11 May 2020.

VCM Phase 2 enhancement allowed *multiple triggers per trading session for each VCM security* and was implemented on 29 March 2021.

2. Overview of VCM Model

HKEX has adopted a dynamic price limit VCM model for the securities market, which would trigger a cooling-off period in case of abrupt price volatility detected at the instrument level. It would also focus on instruments that pose systemic risks arising from the inter-connectedness of securities and derivatives markets. This model is adopted because it is relatively simple and minimises market disruption.

The following diagram illustrate the case of a VCM trigger on an applicable security (VCM Security), using ±10% triggering threshold and price band in the Cooling-off Period as an example.



- In the securities market, VCM is triggered if the potential trade price of a VCM security deviates away from the last traded price 5-min ago by more than the pre-defined thresholds. A 5-min cooling-off period will start.
- During the cooling-off period, trading is allowed within a pre-defined price band.
- Normal trading and VCM monitoring will resume after cooling-off period.

- There is no limitation on the number of VCM triggers per trading session for each VCM security (i.e. Multiple triggers of a VCM security are allowed in the morning or afternoon Continuous Trading Session (CTS)).

3. Instruments Covered under VCM and Triggering Thresholds

VCM currently covers all Hang Seng Composite LargeCap Index constituents, Hang Seng Composite MidCap Index constituents, Hang Seng Composite SmallCap Index constituents, SPAC Shares, SPAC Warrants, and eligible Exchange Traded Products (ETPs)[3] . A tiered structure of triggering thresholds and price bands during the cooling-off period will then be applied, referencing to the last automatch traded price of the VCM security 5 minutes ago. They are further summarised as follows:

[3] Includes Exchange Traded Funds (ETFs) and Leveraged & Inverse Products (L&I Products).

VCM Securities	Triggering Level and Price Bands within Cooling-off Period
Hang Seng Composite LargeCap Index Constituents	±10%
Hang Seng Composite MidCap Index Constituents	±15%
Hang Seng Composite SmallCap Index Constituents	±20%
SPAC Shares	±30% (±15% during the first month of listing[4])
SPAC Warrants	±50% (±25% during the first month of listing[4])
ETFs and -1x Index Inverse Products[5]	±5%
2x Index Leveraged Products and -2x Index Inverse Products[5]	±10%
-1x Single Stock Inverse Products[5]	±10%
Single Stock Leveraged Products with leverage factor larger than 1x but smaller than or equal to 1.5x[5,6]	±15%
Single Stock Inverse Products with leverage factor smaller than -1x but larger than or equal to -1.5x[5,6]	±15%
Single Stock Leveraged Products with leverage factor larger than 1.5x but smaller than or equal to 2x[5,6]	±20%
Single Stock Inverse Products with leverage factor smaller than -1.5x but larger than or equal to -2x[5,6]	±20%

[4] During the first month of listing, the triggering thresholds are ±15% (instead of ±30%) for SPAC Shares, and ±25% (instead of ±50%) for SPAC Warrants. After the first month of listing, the effective date of the new triggering threshold is the same day of the listing date in the next calendar month, or the following day until it is a trading day. If the same day of the listing date in the next calendar month does not exist, it will be the first trading day of the calendar month thereafter.

4. Publication and Maintenance of the List of VCM Securities

The list of the VCM securities and their triggering thresholds are published on the HKEX website.

Any addition of constituent stocks to the indexes will also be added to the list of VCM securities on the effective date of the addition.

Similarly, any deletion of constituent stocks from the indexes will also be removed from the list VCM securities on the effective date of the deletion.

For SPAC Shares and SPAC Warrants, they are added to the list of VCM securites on their listing date.

The Exchange will review the list of ETPs to be included into or removed from the list of VCM securities every quarter and will announce the review result via a circular.

5. Monitoring Phase of the VCM

The VCM is only applicable to board lot order input during certain periods of the CTS (more details below), but not for any order input during the Pre-opening Session (POS) and the Closing Auction Session (CAS).

During the CTS, the potential trade price of a VCM security will be continuously

---

[5] Only applicable to ETPs that fulfill the below criteria:

(i) Average daily turnover for the past 3 months being not less than HK$100 million (or its equivalent); and

(ii) Listed on the Exchange for not less than 3 months.

If an ETP that is already included in the list of VCM securities subsequently meets one of the following conditions, it will be removed from the list of VCM securities:

(i) 3-month average daily turnover for two consecutive quarters being more than HK$50 million (or its equivalent) but less than HK$100 million (or its equivalent); or

(ii) Average daily turnover for past 3 months being less than HK$50 million (or its equivalent).

Where an ETP is traded in more than one currency under different stock codes, the Exchange will calculate the average daily turnover separately for each stock code (except under parallel trading arrangements).

[6] For Single Stock L&I Products with a flexible leverage structure, the actual leverage factor as at quarter-end will be used to determine the applicable triggering threshold and price band.

checked against a dynamic price limit, which is:

the last automatch traded price (i.e. reference price) 5 minutes ago ± the triggering threshold %[7]

Periods during the CTS when VCM Monitoring will not be applied

- *Market Open* - The VCM monitoring is not applied at the first 15 minutes of the Morning and Afternoon CTS to allow free price discovery at the beginning of the CTS after a trading break.

- *Afternoon CTS (or morning CTS on half-day trading day)* - The VCM monitoring is not applied at the last 20 minutes[8] of the afternoon CTS (or morning CTS on half-day trading day) in order to ensure that there is an uninterrupted trading period (not interfered by an cooling-off period) during the last 15 minutes of the last CTS of the day. This can also allow investors to unwind their day positions and avoid taking overnight risks.

6. VCM Trigger and Cooling-Off Period

During the VCM monitoring period in CTS, the potential trade price of a VCM security will be continuously checked against its dynamic price limit. If the potential execution price will be outside its dynamic price limit, the order concerned will be rejected and a 5-minute cooling-off period will be triggered immediately.

There is no limitation on the maximum number of VCM triggers for a VCM security. Multiple triggers per trading session for a VCM security are allowed. After the expiry of a cooling-off period, VCM monitoring will resume within the same trading session.

Trading within a Fixed Price Band

During the 5-minute cooling-off period, the VCM security can continue trading but will only be allowed to trade within a fixed price band (i.e. ± respective price band%[9] from the reference price)

[7] Refer to Section 3 for the triggering thresholds.

[8] Since a cooling-off period will last for 5 minutes, the monitoring will stop 20 minutes before end of afternoon CTS *(or morning CTS on half-day trading day)*.

[9] Refer to Section 3 for the price band percentage.

Order Handling when VCM is triggered

If VCM is Triggered Due to Potential Trade Price > Upper Price Limit	• OTP-C will reject the buy/sell order (i.e. the incoming order) that triggered the VCM and no trade will be executed • OTP-C will also cancel the existing high price buy orders (i.e. those with buy price > upper price limit) that queued in the buy order queue • All the existing sell orders will remain in the order queue no matter if their prices are higher than the upper price limit, and will not be cancelled by OTP-C
If VCM is Triggered Due to Potential Trade Price < Lower Price Limit	• OTP-C will reject the buy/sell order (i.e. the incoming order) that triggered the VCM and no trade will be executed • OTP-C will also cancel the existing low price sell orders (i.e. those with sell price < lower price limit) that queued in the sell order queue • All the existing buy orders will remain in the order queue no matter if their prices are lower than the lower price limit and will not be cancelled by OTP-C

Order Handling during the Cooling-off Period

Any incoming aggressive orders (i.e. buy order > upper price limit and sell order < lower price limit) outside the fixed price band will be rejected by OTP-C immediately.

Passive orders (i.e. buy order ≤ upper limit and sell order ≥ lower limit) will still be accepted by OTP-C to allow building of liquidity.

Cooling-off Period will not be Brought Forward to Next Trading Sessions

If the Morning Session closes before the end of a cooling-off period (e.g. a cooling-off period starting at 11:56), the remaining time of the cooling-off period will not be brought forward to Afternoon Session.

7. Determination of the VCM Reference Price

The reference price of the VCM is the price of the last automatch trade 5 minutes ago, and this being a dynamic price, captures both the magnitude and speed of price changes of individual VCM securities.

The VCM monitoring starts at 9:45am for the securities market. The first reference price for the trading day should be the last traded price executed 5 minutes before 9:45am. Thereafter the reference price will be updated by OTP-C at the end of each one minute interval.

It should also be noted that the reference price established during the Morning Session will not be brought forward to Afternoon Session.

If there was no trade execution 5 minutes ago

For the Morning Session at 9:45am, if there was no trade execution 5 minutes before, OTP-C will further search backward in time for the latest last traded price as the reference price. This search can go backward till the market open where the auction price established during the pre-opening auction will be used as the reference price.

In case there is no trade execution from market open to 5 minutes before the start of the VCM monitoring, OTP-C will use the first traded price executed in the Morning Session as the reference price until there is a subsequent execution.

For the Afternoon Session at 1:15pm, if there was no trade execution 5 minutes before, OTP-C will further search backward in time for the latest last traded price as the reference price. This search can go backward till the market open of the Afternoon Session.

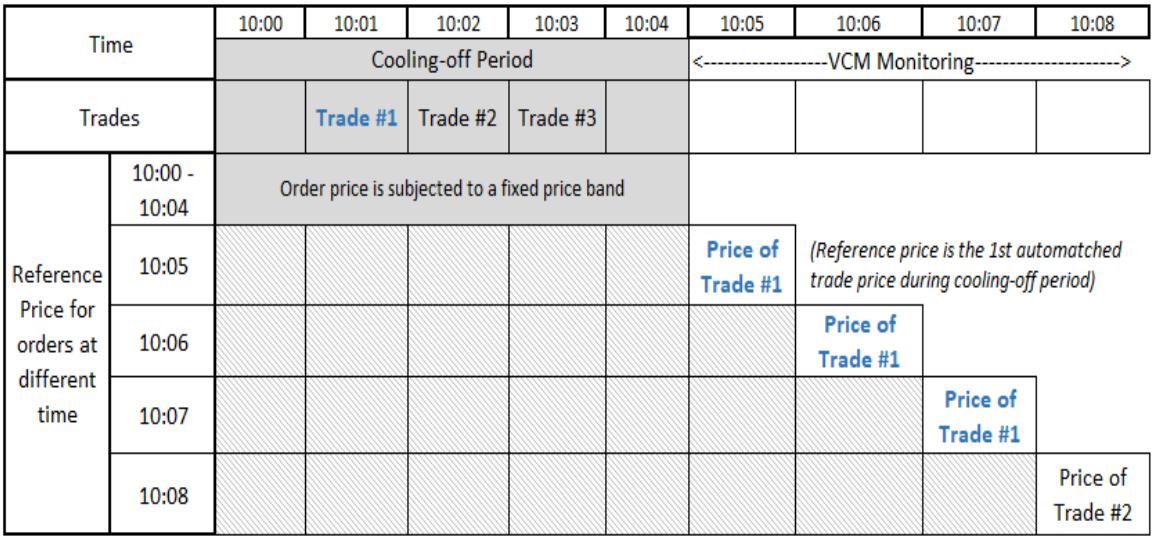
In case there is no trade execution from market open of the Afternoon Session to 5 minutes before the start of the VCM monitoring, OTP-C will use the first traded price executed in the Afternoon Session as the reference price until there is a subsequent execution.

Determination of VCM reference price after the expiry of the cooling-off period

VCM monitoring will resume upon the expiry of the cooling-off period. The first automatch trade recorded in the cooling-off period will become the reference price for resuming VCM monitoring. In the case there is no trading during the cooling-off period, VCM monitoring will only resume after a trade is executed.

The examples below illustrate the details on how the reference price is taken for resuming VCM monitoring in the same trading session after a VCM trigger.

Example 1: When there is trading during the VCM cooling-off period, the price of the first automatch trade in the cooling-off period will become the reference price for resuming VCM monitoring.



- Assume the VCM cooling-off period is triggered from10:00am to 10:04am.
- During the cooling-off period, orders submitted are subject to a fixed price band validation. The first automatch trade during cooling-off period (Trade #1) happens at 10:01am. Subsequently, Trade #2 is recorded during 10:02 and Trade #3 is recorded during 10:03.
- VCM monitoring resumes at 10:05am after the expiry of the five-minute cooling-off period. The reference price is reset by taking the first automatch trade in the cooling-off period, i.e. the price of Trade #1.
- The reference price will eventually resume to be last traded price 5 minutes ago (if applicable) to continue the VCM monitoring.

Example 2: When there is no trading during the cooling-off period, the reference price right after the cooling-off period cannot be formed and there will temporarily be no dynamic price band to limit the trade prices of the security. Once an automatch trade is executed subsequently, the price of this first automatch trade will become the reference price and VCM monitoring will resume.

<table>
<tr><td colspan="2">Time</td><td>10:00</td><td>10:01</td><td>10:02</td><td>10:03</td><td>10:04</td><td>10:05</td><td>10:06</td><td>10:07</td><td>10:08</td><td>10:09</td></tr>
<tr><td colspan="2"></td><td colspan="5">Cooling-off Period</td><td></td><td colspan="4"><----------VCM Monitoring----------></td></tr>
<tr><td colspan="2">Trades</td><td colspan="5"></td><td></td><td>Trade #1</td><td>Trade #2</td><td>Trade #3</td><td></td></tr>
<tr><td rowspan="6">Reference Price for orders at different time</td><td>10:00 - 10:04</td><td colspan="5">Order price is subjected to a fixed price band</td><td colspan="5"></td></tr>
<tr><td>10:05</td><td colspan="5"></td><td>(No VCM monitoring)</td><td colspan="4"></td></tr>
<tr><td>10:06</td><td colspan="5"></td><td></td><td>Price of Trade #1</td><td colspan="3">(1st trade price after the cooling-off period becomes the Reference Price)</td></tr>
<tr><td>10:07</td><td colspan="5"></td><td></td><td></td><td>Price of Trade #1</td><td colspan="2"></td></tr>
<tr><td>10:08</td><td colspan="5"></td><td></td><td></td><td></td><td>Price of Trade #1</td><td></td></tr>
<tr><td>10:09</td><td colspan="5"></td><td></td><td></td><td></td><td></td><td>Price of Trade #1</td></tr>
</table>

- Assume the VCM cooling-off period is triggered from 10:00am to 10:04am. During the cooling-off period, no trades are executed.
- At 10:05am, after the expiry of the cooling-off period, there is no VCM monitoring as no reference price is formed,
- Assume an automatch trade (Trade #1) happens at 10:06am (the first trade after the cooling-off period). The price of Trade #1 then becomes VCM reference price and VCM monitoring resumes.
- The reference price will eventually resume to be last traded price 5 minutes ago (if applicable) to continue the VCM monitoring

8. Quotation Rule and Price Warning During Cooling-off Period

The price checking in relation to 24 spreads rule and 5-times rule will still be applicable as usual during the VCM cooling-off period.

The existing price warning mechanism (i.e. if a trader submits an order to OTP-C with this warning checking turned on, OTP-C will return a warning message to the trader when the order price is set at 21 spreads or more away from the nominal price) will also applicable during the VCM cooling-off period.

9. Additional Market Data Dissemination for VCM

Additional market information will be disseminated on HKEX Orion Market Data Platform for Securities Market (OMD-C) to provide transparency of the VCM to the

market. Such information includes an indicator to identify VCM securities and the details of each cooling off period triggered by the VCM.

Before the start of a trading day, the OMD-C message for providing reference data will indicate whether a security is eligible for VCM or not on that day by the VCM security indicator.

Once a cooling off period is triggered by the VCM, the details of the cooling off period, including the stock code of the security concerned, the reference price, the lower price limit, the upper price limit, the start and end times of the cooling off period, will be disseminated immediately.

Reference price is only disseminated when a cooling off period is triggered. There is no reference price information in normal days where the VCM does not trigger any cooling off period.

10. Trading of Linked Instruments

All VCM securities will be treated independently, and therefore trading of its related or linked instruments (e.g. single stock options or derivative warrants) will remain unaffected when a VCM is triggered on a VCM security.

When a VCM security is under a cooling-off period, trading of its related instruments can continue without restriction.

11. Odd Lot / Special Lot Orders and Manual Trades

The VCM is only applicable for board lot order input during the CTS.

Odd lots / special lots orders and manual trades are not subject to VCM monitoring.

Input, amend, cancel of odd lot / special lot orders and input or reject of manual trades are allowed during VCM cooling-off period.

12. Securities Market Making (SMM) and Liquidity Provision

HKEX recognises that it may be difficult for market makers or liquidity providers to hedge when a VCM is triggered, since the VCM would impact their market making capability.

The current rules, regulations and procedures already make allowance for such

situations. Per existing practice, the market makers or liquidity providers may request waiver or relaxation of their market making obligations.

13. Enquiries and Others

Market participants who would like to further understand the details of the VCM can refer to the following website, email accounts and hotline numbers:

VCM webpages	https://www.hkex.com.hk/services/trading/securities/overview/trading-mechanism?sc_lang=en https://www.hkex.com.hk/vcm
Email	Securities Market: OTPC@hkex.com.hk Market Data/OMD-C: IVSupport@hkex.com.hk
Hotline	Securities Market : 2840 3626 Market Data/OMD-C : 2211 6558

Hong Kong Exchanges and Clearing Limited

8/F, Two Exchange Square
8 Connaught Place
Central, Hong Kong

hkexgroup.com | **hkex.com.hk**

info@hkex.com.hk
T +852 2522 1122
F +852 2295 3106