MARKET CODE / OPERATIONAL CODE CHANGE PROPOSAL Change Proposal reference (To be completed by the TP Sec.) MCCP278 Version No. D.1

SUBMISSION				
GENERAL DETAILS				
TITLE	HVI Security			
COMPANY	СМА			
Change Proposals must be authorised by the person designated by the signatory to the Market Code Framework / Accession Agreement				
AUTHORISED SIGNATURE			NAME	Neil Cohen
CONTACT NAME		CONTACT EMAIL; TEL/MOB.	Neil.cohen	@cmascotland.co.uk
ASSOCIATED MCCP / OCCP				
ASSOCIATED DOCS.	Annex 1: Proof of Concept (not attached) Annex 2: PoC Results (not attached)			
PROPOSED URGENCY	Non-urgent			
REASONS FOR URGENCY				
The CMA CEO will review this information and make a decision as to whether to take this MCCP / OCCP forward as urgent as defined under Market Code Part 8.9.1				

MCCP278—HVI Security CMA

MCCP / OCCP DETAILS

ISSUE OR DEFECT WHICH THIS MCCP / OCCP SEEKS TO ADDRESS
Required under Market Code Parts 8.7.1 (ii) (b) and 8.8.1 (ii) (b)

Recent Penetration Testing undertaken by the CMA has identified a small number of low-risk mechanisms for unauthorised access pertaining to the HVI. One mechanism suggested by the CMA OSP to provide additional security beyond that already implemented, is that the CMA employs a form of 'HVI Lockdown' to add an additional security layer to HVI access.

The CMA CS LVI and HVI currently share an interface (IP address) that is fully accessible to the entire internet. However, it is possible to limit this access to selected Users by creating an Access Control List (ACL) with permitted IP addresses, or some equivalent approach. This would reduce the risk to the CMA CS against cyber security threats.

This proposal seeks to restrict access to the HVI as described above.

DESCRIPTION OF THE NATURE AND PURPOSE OF THE MCCP / OCCP AND HOW IT MEETS THE MARKET CODE / OPERATIONAL CODE OBJECTIVES AND PRINCIPLES FOR THE MARKET DOCUMENTS Required under Market Code Parts 8.7.1 (ii) (c) and 8.8.1 (ii) (c)

General Description

To give effect to the proposal, in light of the confirmation of its practicality (ref. Annex 1: Proof of Concept and Annex 2: PoC Results - not attached), CSD0301 Annex should be modified to incorporate the additional security layer associated with limiting HVI access to identified IP addresses.

It should be noted that no changes to LVI access are envisaged as part of this proposal.

Principles and Objectives affected

CMA Guidance Note GN009 may be referred to for assistance with this section

PRINCIPLE	AFFECTED (Y/N)	DESCRIPTION
Proportionality	Υ	See below.
Transparency	N/A	
Simplicity, Cost-effectiveness, and Security	Υ	Security against cyber-attacks is further reduced.
Non-exclusivity	N/A	
Barriers to Entry	Υ	Barriers to entry are reduced by virtue of the risk of cyber-attack being further reduced.
Customer Contact	N/A	
Non-discrimination	N/A	
Non-detrimental to SW Core Functions	N/A	

MC / OC OBJECTIVES	N/A	
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IMPACT Required under Market Code Parts 8.7.1 (ii) (d), (f) and (g), and 8.8.1 (ii) (d) and (f)		
CONFIGURED ITEM	IMPACTED (Y/N)	DESCRIPTION
MC / OC	N	
CSDs	Υ	CSD0301 Annex.
Wholesale Services Agreements	N	
Licenses	N	
CMA Central Systems	Υ	The CMA HVI Port will need to be modified to include a check that an HVI IP address is on the Access Control List (ACL) before access is granted.
CMA business processes	Υ	User access processes will need to include provision of any HVI IP addresses.
Trading Party systems	N	
Trading party business processes	Υ	HVI Users will need to provide their IP addresses when setting up, or modifying, HVI access.

DRAFT LEGAL TEXT
Required under Market Code Parts 8.7.1 (ii) (d) and 8.8.1 (ii) (d)

CSD0001 (Market Training and Assurance) Should be modified as follows:

Section 4.1 (CMA Obligations).

On the Market Assurance Commencement Date, which must be no more than 10 Business Days after the submission of the written notification from a Licensed Provider that they have completed development and all planned testing of their High-Volume Interface, the CMA will request a list of IP addresses that the LP may wish to use for the HVI (including any test environments and Market Continuity environments that the LP may utilise). Having received such list, the CMA will then establish suitable access to a Central Systems test system and will commence Market Assurance Testing.

Section 4.2 (Licensed Provider Obligations).

A Licensed Provider must request a Market Assurance Commencement Date for Market Assurance Testing from the CMA. The request should include:

- A preferred Commencement Date, which must be no more than 10 Business Days after the scheduled date for completion of HVI development and testing,
- A scheduled date for completion of High-Volume Interface development and testing (if not already complete)
- A list of Transactions that will be undertaken using the HVI
- A list of all IP addresses that the LP may wish to use for the HVI (including any test environments and Market Continuity environments that the LP may utilise).

Section 4.4 (Market Assurance Process).

Step a. LP Notification

An LP wishing to undertake Market Assurance Testing, must submit an application which must include a preferred Commencement Date for the testing and any IP addresses that the LP may wish to use for the HVI (including any test environments and Market Continuity environments that the LP may utilise).

Section 5.1 (Market Re-assurance Process – CMA Obligations). The following new para should be added:

In addition, although not requiring any Market Re-assurance testing, the CMA will modify HVI access to accommodate any notified changes to the IP addresses that a Trading Party wishes to use for the HVI within one Business Day of any such notification.

Section 5.2 (Market Re-assurance Process – Trading Party Obligations). The following new para should be added:

In addition, although not requiring any Market Re-assurance, Trading Parties must provide any changes to the IP addresses that they wish to use for the HVI (including any test environments and

Market Continuity environments) no less than 2 Business Days prior to any such change being made.

CSD0301 Data Transaction Catalogue Annex A should be modified to include a description of the firewall configuration and the use of the ACL.

IMPLEMENTATION DETAILS

PROPOSED IMPLEMENTATION DATE OR LEAD TIME

Timescale must not overlap with the period of consultation with the Commission and should take account of the impacts identified in Section 0. Any quoted lead time should commence from date of Approval.

September 2022

ANY LIMITATIONS OR DEPENDENCIES FOR IMPLEMENTATION

ANY OTHER COMMENTS

The following are the Indicative User Requirements for this proposal:

UR 1 Separation of access between HVI and LVI. The CMA CS should be re-configured such that the port used to access the HVI should be different to that for the LVI and this arrangement should be replicated for all CMA CS environments.

UR 2 HVI Access Control via the ACL. The port for HVI access (for all CMA CS environments) should be set up to only allow access to identified client IP addresses.

UR 3 The Access Control List. Identified IP addresses should be maintained on an Access Control List (ACL). The ACL should be:

- Accessible to the HVI port (on any CMA CS environment) to check for valid access.
 If access is requested by a valid IP address, access can continue to be established.
 Otherwise, access would be blocked.
- Updateable by the CMA OSP, on request from the CMA Head of Operations. This should be achievable overnight, following a valid request.
- Maintained as part of the infrastructure configuration for the CMA CS.

UR 4 Administrative Processes. The following processes and arrangements will need to be identified in relevant CMA LWIs, as follows:

- LWI 101 (Accession, Termination and Assignment) New HVI User, or User with HVI updates to accommodate. The process should be amended to include the request from and submission of IP addresses for the new/modified HVI Users and the process for the CMA OSP to add these to the ACL, with suitable notifications for success, or failure.
- LWI 101 (Accession, Termination and Assignment) HVI User that is withdrawing from HVI use (including instances where an LP is being terminated or is a Transferor). The process should be amended to ensure that the CMA OSP removes

- any redundant IP addresses from the ACL, with suitable notifications for success, or failure.
- LWI 108 (Security and Access). The LWI should be modified to include the ACL as a security technique, applied to the CMA CS (HVI only).
- LWI 302 (CMA Operations). The maintenance of the ACL should be added.

TP ASSESSMENT				
ASSESSMENT PROCESS				
ASSESSMENT START DATE	2022-01-13		ASSESSMENT END DATE 2022-06-16	
IMPACT ASSESSMENT REQ	UIREMENT		IA REQUIRED	
CONSULTATION REQUIREM	IENT		TP CONSULTATION NOT REQUIRED	
ASSOCIATED DOCUMENTS (to this Part B)				
ASSESSMENT DETAILS				
CHANGE SPEC AND IMPACT	T (IF DIFFERENT FROM	M THAT (ORIGINALLY SUBMITTED)	
CMA INTERNAL SYSTEMS	IMPACT			
DRAFT LEGAL TEXT (if different from that originally submitted)				
TP ASSESSMENT Taking into account complexity, importance and urgency, and having regard to whether or not such proposal is within the relevant Objectives and Principles as required under Market Code Parts 8.7.1 (v) and 8.8.1 (iv)				
Impact on Principles and (if different from that orig				
		6k (IA + 33%) TE: Operational costs are minimal.		
Benefit Estimate (L: < 10k, M: £10k to £10	00k, H: > £100k)	Assur	me: M.	
TP DECISION		TP AF	PPROVED	
FINAL TP VIEWS		Unan	imously approved by the	meeting on 16/6/22

PLANNED IMPLEMENTATION DATE	2022-09
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WITHDRAWN BY PROPOSER?	No
COMMENTS	
DATE OF WITHDRAWAL	

COMMISSION APPROVAL		
DATE FINAL REPORT ISSUED TO COMMISSION	2022-06-24	
APPROVAL STATUS	APPROVED CHANGE	
DATE OF APPROVAL STATUS	2022-07-27	
COMMISSION RESPONSE REFERENCE	CMA CP270722	

IMPLEMENTATION		
IMPLEMENTATION DATE 2022-09-22		
IMPLEMENTATION DETAILS (MC version, CSD versions, CMA Central Systems release number, etc.)		
(MC version, CSD versions, CMA Central Systems release number, etc.) CSD0001 v6.0 CSD0301 Annex v28		