

The Options Clearing Corporation

Responses to the Questionnaire for Financial Market Infrastructures set forth in the FSB Continuity of Access to FMIs for Firms in Resolution

Below in bold-faced text, please find the questions for financial market infrastructures (“FMIs”) set forth in the Financial Stability Board (“FSB”) Continuity of Access to FMIs for Firms in Resolution¹ followed by responsive information provided by The Options Clearing Corporation (“OCC”).² Capitalized terms used without definition in this document shall have the meaning ascribed to such terms in OCC’s By-Laws and Rules.³

Part I: Legal entity and general contract/service information:

1. Please provide the following details:

a) Full Legal Name

The Options Clearing Corporation.

b) Legal Entity Identification Number (LEI)

OCC’s legal entity identifier is 549300CII6SLYGKNHA04.

c) Jurisdiction of incorporation and registered number in the relevant corporate registry

OCC is a corporation formed pursuant to the laws of the State of Delaware in the United States. The File Number assigned to OCC by the Delaware Division of Corporations is 784618.

d) Supervisory, resolution or other relevant regulatory authority responsible for overseeing the activities of your organisation in (i) the relevant jurisdiction(s) of incorporation, and (ii) if different from the jurisdiction of incorporation, the relevant jurisdiction(s) of operation. Where an FMI is overseen by more than one regulatory authority, please also indicate which is the principal/ home regulator of the FMI and the relevant function(s) regulated by the respective authorities.

OCC operates under the jurisdiction of the U.S. Securities and Exchange Commission (“SEC”) as a registered clearing agency, the U.S. Commodity Futures Trading

¹ FSB Continuity of Access to FMIs for Firms in Resolution, August 14, 2020, <https://www.fsb.org/wp-content/uploads/P140820.pdf>.

² This document provides an overview of OCC and certain of its By-Laws, Rules and policies and is not a rule, interpretation or policy. OCC will periodically update the information set forth in this document; however, its contents may differ from OCC’s By-Laws, Rules and Policies. In such event, OCC’s By-Laws, Rules and Policies shall control and this document shall have no effect.

³ OCC’s By-Laws and Rules are available at <https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>.

Commission (“CFTC”) as a derivatives clearing Organization, and under prudential regulation by the Board of Governors of the Federal Reserve System (the “Federal Reserve”) as a systemically important financial market utility (“SIFMU”). The SEC is OCC’s primary regulator.

e) The ownership arrangement of the legal entity (e.g. is it majority owned by its users?)

OCC’s ownership structure is detailed in Article VIIB of its By-Laws. OCC is owned by its participant exchanges. Each of these exchanges is registered with the SEC under Section 5 of the *Securities Exchange Act of 1934* (“Exchange Act”) as a national securities exchange. The exchanges are as follows:

- Cboe Exchange, Inc.;
- Nasdaq ISE, LLC;
- Nasdaq PHLX, LLC;
- NYSE American LLC; and
- NYSE Arca, Inc.

2. Please provide the following information:

a) Hyperlink to the published FMI disclosure template under the Disclosure Framework for Financial Market Infrastructures.

In accordance with best-practice guidance issued by the Committee on Payments and Market Infrastructures and the Board of the International Organization of Securities Commissions (“CPMI-IOSCO”), OCC publishes disclosures concerning CPMI-IOSCO’s Principles for Financial Market Infrastructures (“PFMI”). OCC’s PFMI disclosures are available at <https://www.theocc.com/Risk-Management/PFMI-Disclosures>.

b) a list or description of services provided, including a summary of the key ongoing access requirements that you require of members for each service (including operational, financial, and capital requirements).

As a registered clearing agency under SEC jurisdiction, OCC clears transactions for exchange-listed equity options. As a registered derivatives clearing organization under CFTC jurisdiction, OCC offers clearing and settlement services for transactions in futures and options on futures. OCC also provides central counterparty clearing and settlement services for securities lending transactions.

OCC’s participant requirements are outlined in Article V, Section I of OCC’s By-Laws (Qualifications) and Chapters II (Miscellaneous Requirements) and III (Financial Requirements) of the Rules. These requirements are objective measures designed to ensure that participants are able to meet their obligations, without creating overly restrictive access requirements.

To qualify for membership, an applicant must be a broker-dealer registered with the SEC, a futures commission merchant (“FCM”) registered with the CFTC, or a non-U.S. securities firm. An applicant must also meet specified minimum net capital requirements. For example, the initial minimum net capital requirement is \$2.5 million for SEC-registered broker-dealers or CFTC-registered FCMs. To qualify for membership, Clearing Members must satisfy certain other requirements relating to operational capabilities and experience and qualifications of clearing operations personnel.

3. Do your members/ clients access your services directly or through an intermediary?

Both. Clearing Members access OCC’s services directly, and customers of Clearing Members access OCC’s services through their Clearing Member.

4. Do your members/clients need a specific software or IT programme to receive your services? If the answer is ‘yes’, is such software/ IT programme your proprietary product or a specific third party product (please also consider whether specific plug-ins that you require clients to run only run in combination with certain software, e.g. Microsoft products)?

Clearing Members do not need a specific software or IT program. Information on connecting to OCC’s Inbound FIXML Connectivity Mechanisms is available at <https://www.theocc.com/Clearance-and-Settlement/FIXML-Reference> and information related to OCC’s technical certification services is available at <https://www.theocc.com/Clearance-and-Settlement/Certification-Testing>.

In addition, if a Clearing Member services customers, they will also need OCC’s Theoretical Pricing Services to compute customer margin requirements. Theoretical Pricing Services comprise the following:

Risk Based Haircut (“RBH”) – OCC’s proprietary Risk Based Haircut methodology is used by Clearing Members and other market participants to calculate projected portfolio liquidating values under various potential market scenarios for the purposes of calculating customer margin requirements.

Customer Portfolio Margin (“CPM”) – OCC developed CPM to support portfolio-based margining of customer accounts consistent with Financial Industry Regulatory Authority Rule 4210.

Options and Futures Risk Array (“OFRA”) Files – OCC generates and distributes Standard Portfolio Analysis of Risk (“SPAN”) parameter files that are utilized by file recipients to calculate portfolio performance for certain exchange-traded futures and options cleared by OCC.

5. If your contracts are all governed by one governing law, please specify which governing law this is. If there are different governing laws, please specify the main governing laws applicable and explain whether this is dependent on the location of the services provided or as negotiated with the members/ client, or any other reason.

As described more fully in Article IX, Section 10 of OCC's By-Laws, the laws of the State of Illinois and the federal law of the United States of America, without regard to conflicts of law principles, shall govern the application and interpretation of OCC's By-Laws and Rules, as well as all other agreements between OCC and its Clearing Members.

6. Are there any other service providers or FMIs (for example, CSDs, payment systems or other infrastructure) that a member / client would need to have access to in order to receive your services? Please provide the names of those types of service providers and their regulatory status, where applicable.

Clearing Members must maintain the following access:

- An account with a commercial bank approved by OCC to meet day-to-day cash settlement obligations. OCC's approved commercial banks are regulated by the Office of the Comptroller of the Currency, the Federal Deposit Insurance Corporation, and/or the Federal Reserve.
- Equity options require Clearing Members to be a National Securities Clearing Corporation ("NSCC") member or appoint another Clearing Member to perform NSCC settlement on their behalf. NSCC is a registered clearing agency with the SEC.
- OTC options require Clearing Members to subscribe to the market venue.
- Securities lending requires Clearing Member to be a Depository Trust Company ("DTC") member and, if necessary, a subscriber to the market venue. DTC is a central securities depository and a registered clearing agency with the SEC.
- Cross-margin arrangements require Clearing Members to either be a direct member or have an affiliate who is a direct member of the participating CCP. Currently, the Chicago Mercantile Exchange Inc. ("CME") is the only participating CCP. CME is registered with the CFTC as a DCO.

7. Does your operating framework recognise the continued operations of FMI participants once they enter into resolution (e.g. as under the Bank of England's Resolvability Assessment Framework, or the Single Resolution Board's Expectations for Banks)?

Our operating framework does not automatically recognize the continued operations of FMI participants once they enter into resolution. Although the entry into resolution of an FMI participant would not necessarily trigger the suspension of a Clearing Member that continued to meet its obligations to OCC. Entry into resolution, however, could be indicative of financial difficulty that may result in a suspension under Rule 1102. In accordance with Rule 1102, the Board of Directors or a Designated Officer may

summarily suspend any Clearing Member which is in such financial or operating difficulty that the Board of Directors or a Designated Officer determines and so notifies the appropriate regulatory agencies that suspension is necessary for the protection of OCC, other Clearing Members, or the general public. This decision would be case specific and would be dependent on the facts and circumstance surrounding the entry into resolution of the clearing member.

Part II: Rulebook / Contractual provisions regarding termination⁴

8. Discretionary termination rights.

a) Rule Book / Participation agreement provisions: which provisions give rise to a right to terminate a service user's access? Are the FMI's termination provisions disclosed publicly? If so, please provide any link(s) to that information.

OCC's processes for facilitating the suspension or termination of a Clearing Member are set forth in its By-Laws and Rules.⁵ Chapter XI of OCC's Rules governs the suspension of a Clearing Member and OCC Rule 1102 describes several specific events that may lead to the suspension of a Clearing Member that no longer meets OCC's membership criteria.

Several other provisions in OCC's By-Laws and Rules provide OCC with the ability to impose restrictions or limitations to a user's access to a particular service. For example, a Clearing Member's cross-margin account may be summarily suspended by OCC pursuant to the objective criteria set forth in OCC Rule 707 or Article VI, Section 25 of OCC's By-Laws. OCC Rule 305 allows OCC to restrict a Member's transactions, positions and activities, which could include the termination of a specific service at OCC rather than a full suspension.

In addition, OCC Rule 1201 provides that OCC may censure, suspend, expel or limit the activities, functions or operations of any Clearing Member for any violation of the By-Laws and Rules or its agreements with the Corporation. Prior to issuing such a sanction OCC would conduct disciplinary proceedings.

b) Are these provisions based solely on objective criteria, or can the FMI exercise judgement when triggering termination?

The provisions described in response to question 8.a above are based predominately on objective criteria that is described in OCC's By-Laws and Rules. Certain provisions, including OCC Rules 305(a) and 1102(a)(v), allow OCC's Board of Directors or a Designated Officer to exercise judgement in suspending a clearing member. Such determinations are subject to a review or appeal process. See, e.g., OCC Rules 305(c) and 1110.

c) Does the FMI use 'forward looking' indicators that may trigger termination, and if so, which ones?

⁴ If your FMI also has the option to suspend rather than terminate membership, please specify for each answer whether and how it would differ for suspension. Please also note Question 4, which asks about the details of suspension in your FMI's provisions.

⁵ OCC's By-Laws and Rules are available at <https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>.

The events that may trigger termination under OCC's rules are generally based on the occurrence of a specific event. Both OCC Rule 305 and 1102 include Interpretations and Policies describing situations that may trigger a termination, which could be viewed as forward looking. For example, a Clearing Member could be suspended under either rule if it lacks access to sufficient financial resources to meet its obligations arising from clearing membership in extreme but plausible market conditions or lacks the ability to process expected volumes and values of transactions, fulfill collateral, payment and delivery obligations or participate in applicable default management activities.

d) Do the FMI's provisions envisage that (i) financial stress on the participant's side (as defined in its provisions – please provide the definition of such stress) and/or (ii) a resolution event (recognised in the relevant jurisdiction) qualifies as a material change that may trigger termination?

Under Rule 1102, a Clearing Member may be suspended if it fails to make any delivery of cash, securities or other property to OCC or another Clearing Member as required by OCC By-Laws or Rules. A suspension is also permitted if a Clearing Member is in such financial or operating difficulty that the Board of Directors or a Designated Officer determines that suspension is necessary for the protection of OCC, other Clearing Members, or the general public.

The Interpretations and Policies following Rule 305 describe specific financial indicators that could cause OCC to restrict a Member's transactions, positions and activities under the Rule. These indicators include: (i) failing to maintain net capital of \$2.5 million (or an alternative minimum amount of net capital calculated under OCC Rule 303(a)(3) or (a)(4), as applicable); (ii) maintaining less than 8-1/3 percent of aggregate indebtedness or 4 percent of aggregate debit items, as applicable, for a period of three months; (iii) maintaining subordinated debt (excluding any portion treated as equity under SEC rules) that exceeds 70 percent of its debt-equity total on one or more days in two consecutive months; or (iv) lacking access to sufficient financial resources to meet obligations arising from clearing membership in extreme but plausible market conditions.

OCC Rule 1101 provides that a Clearing Member must immediately notify OCC if it is unable to meet its obligations, is insolvent, or becomes the subject of a bankruptcy petition, receivership proceeding or the equivalent. Such notice may result in a suspension under Rule 1102, which allows OCC to suspend a Clearing Member that is in such financial or operating difficulty that the Board of Directors or a Designated Officer determines that suspension is necessary for the protection of OCC, other Clearing Members, or the general public.

e) During stress or resolution of the member, are actions by other FMIs taken into account as possible indicators or triggers for termination?

As described in OCC Rule 1102, a Clearing Member may be suspended if it is expelled or suspended from any self-regulatory organization or, in the Case of a Non-U.S. Clearing Member, is expelled or suspended by its Non-U.S. Regulatory Agency or any securities exchange or clearing house of which it is a member.

f) Are there any other relevant provisions regarding termination? If so, please explain why they are necessary for the FMI to enable rights for termination.

Additional information related to OCC's termination process can be found in Chapter XI of OCC's Rules, which governs the suspension of a Clearing Member.

9. Suspension or restriction of membership.

a) Does your framework allow for suspension or restriction of a participant's membership rather than termination? If yes, what exactly does this imply (for instance, limiting the right to enter new transactions in the system)? Please explain any differences to termination.

OCC Rule 1102 provides for the suspension of a Clearing Member upon the occurrence of one or more specific events set forth in the rule. Interpretation and Policy .01 to Rule 1102 provides that the occurrence of any such event shall constitute an event of default with respect to the Clearing Member. A suspension is grounds for termination of the Clearing Member; however, the suspension itself results in the prompt liquidation of the Clearing Member's margin deposits and Clearing Fund contributions (Rule 1104), allows OCC to liquidate or transfer open positions (Rule 1106) and relieves OCC of any obligation to accept trades from the Clearing Member (Rule 1105). Additional information on the implications of a suspension is available in Chapter XI (Suspension of a Clearing Member) of OCC's Rules.

As described more fully in response to question 8, OCC Rule 305 allows OCC to restrict certain transactions, positions, and activities. OCC could limit or prohibit opening transactions, require a reduction or elimination of existing positions, require hedging of existing positions, or a require transfer of an existing account to another Clearing Member.

b) Is there a specific timeline for a suspension period before it leads to termination of membership, and are there circumstances where suspension may be lifted without a termination of membership?

OCC permits suspended Clearing Members to appeal suspension in accordance with the procedure set forth in OCC Rule 1110. The Clearing Member must file a written notice of appeal with the Secretary of OCC within five days after the date of suspension, and appeals shall be heard as promptly as possible, but in no event more than fourteen days after the filing of the notice of appeal. Any decision to affirm a suspension shall be reviewable by the Board of Directors on its own motion or on written demand by the

appellant filed with the Secretary of the Clearing Corporation within five days after receipt of notice of the panel's decision.

Rule 1110(d) states that the filing of an appeal pursuant to this rule shall not impair the validity or stay the effect of the suspension. Any actions taken by OCC to liquidate the suspended member's portfolio are not reviewable even if the suspension is overturned. In addition, the reversal of a suspension shall not invalidate any acts of the OCC taken prior to such reversal, and the rights of any person which may arise out of any such acts shall not be affected by the reversal of such suspension.

10. Critical FMI service rules, contractual arrangements, or procedures should reflect any legal restrictions on termination and suspension of access because of an FMI service user entering into resolution (FSB 2017 Guidance, 1.1).

a) In what way do your rules, contractual arrangements and procedures reflect this?

As described in response to question 8.d above, OCC Rule 1101 provides that a Clearing Member must immediately notify OCC if it is unable to meet its obligations, is insolvent, or becomes the subject of a bankruptcy petition, receivership proceeding or the equivalent. Such notice may result in a suspension under Rule 1102. The permissive nature of Rule 1102 allows OCC to give due consideration to applicable law that might restrict the suspension of a Clearing Member entering into resolution.

b) Do such arrangements include the effect of parent or affiliates entering resolution?

The default of a parent or affiliate would not necessarily trigger the suspension of a Clearing Member that continued to meet its obligations to OCC but could be indicative of financial difficulty that may result in a suspension under Rule 1102. As noted above, the permissive nature of Rule 1102 would allow OCC to give due consideration to applicable law that might restrict the suspension of a Clearing Member whose parent or affiliate entered into resolution.

c) Do you have any plans to amend or otherwise change, or have you recently changed your rules, contractual arrangements or procedures to address legal restrictions on termination of access in the event that an FMI service user enters resolution? If so, please provide details of the proposed/applied changes.

No.

11. Triggers, procedure and consequences of termination of FMI participation.

a) Triggers: in which situations would termination be considered? Is participation/membership generally terminated in case of financial stress? Are

these criteria clearly outlined in the rulebook or other contractual documentation (please include the relevant references)?

As described more fully in response to question 8.d above, OCC Rules 305 and 1102 provide clear criteria for financial stressors that could result in restrictions on certain transactions, positions and activities or the suspension of a Clearing Member.

b) Please explain the management and monitoring around the termination process - steps and timelines of the escalation and decision-making, as well as of the implementation of termination. (Please provide concrete examples, if any, of participation/membership terminations and flag, where relevant, any changes made to the termination process since).

Pursuant to Rule 1101, any Clearing Member that is unable to meet its obligations, is insolvent or is the subject of a bankruptcy petition or a receivership proceeding or equivalent filing or proceeding is required to immediately provide telephone notice of such event followed promptly by confirming written notice. In addition, Rule 1102(b) requires a Non-U.S. Clearing Member to immediately notify OCC if it is expelled or suspended by a Non-U.S. Regulatory Agency.

As described in Rule 1102, a Clearing Member may be summarily suspended by OCC's Board of Directors or a Designated Officer. If the determination to summarily suspend a Clearing Member is made other than by the Board of Directors, then notice of the suspension must be given to the Board of Directors as soon as practicable.

Upon the suspension of a Clearing Member, Rule 1103 provides that OCC will notify all Clearing Members of the suspension. Such notice shall state, in general terms, how pending transactions, open positions, stock loan and borrow positions, exercised option contracts, matured futures and other pending matters will be affected and what steps are to be taken in connection therewith.

Additional information related to OCC's termination process is set forth in Chapter XI (Suspension of a Clearing Member) of OCC's Rules.

c) What are the consequences of termination on the participant/member's ability to access the FMI's services? Would the firm be able to complete the processing of any outstanding transactions (e.g. not accepted for clearing or settlement, or in process but not complete) it has in the FMI's systems, or are these cancelled or liquidated?

The suspension of a Clearing Member results in the prompt liquidation of the Clearing Member's margin deposits and Clearing Fund contributions (Rule 1104), allows OCC to liquidate or transfer open positions (Rule 1106) and relieves OCC of any obligation to accept trades from the Clearing Member (Rule 1105). OCC can stop accepting trades immediately (i.e., it does not have to wait until the end of the trading session).

d) Would the decision to terminate participation/ membership be notified ex ante (i.e. before it takes effect) to the competent authorities of (i) the direct participant and/or of (ii) the FMI? Would this decision be communicated ex ante to the participant itself? On both aspects, how long in advance of actual termination would such notifications occur?

OCC will advise the suspended Clearing Member, other Clearing Members, and appropriate regulatory authorities (including other self-regulatory organizations) when it has suspended a Clearing Member, but would generally not provide an ex ante notice to the Clearing Member or other regulators.

e) What impact would a participant/member's termination have on their parent/subsidiaries' direct membership in the FMI?

The default of a Clearing Member would not necessarily trigger a suspension of a parent or affiliate that continued to meet its obligations to OCC but could be indicative of financial difficulty that may result in a suspension under Rule 1102 or the imposition of additional requirements.

f) Does the FMI have cross-default provisions in its rule set? Could it put a member in default because of an affiliate's insolvency or of an indirect participant/client's default or do the rules explicitly prevent or exclude such automatic termination (as long as other obligations are being met)?

OCC has not adopted an explicit cross-default rule. The default of an affiliate would not necessarily trigger the suspension of a Clearing Member that continued to meet its obligations to OCC but could be indicative of financial difficulty that may result in a suspension under Rule 1102 or the imposition of additional requirements.

g) What assistance would the FMI provide with the porting (within the FMI) of the participant's direct and/or indirect positions/outstanding transactions to a parent/subsidiary membership, third party successor or bridge entity?

Rules 1104 and 1106 contemplate the transfer of positions to a non-defaulting Clearing Member. OCC will use commercially reasonable efforts to attempt to port positions, where appropriate and permitted by applicable regulatory requirements and oversight authorities. For the protection of non-defaulting Clearing Members, the markets cleared by OCC and the public, in the event of a Clearing Member default, OCC retains the right to promptly liquidate all of the positions cleared by the defaulting Clearing Member to return OCC to a matched book.

h) Please discuss any other points related to termination.

OCC has prepared an overview of its Clearing Member Default Rules and Procedures, which is available on the OCC website at <https://ncuoccblobdev.blob.core.windows.net/media/theocc/media/risk-management/default-rules-and-procedures.pdf>.

12. FMIs should retain the ability, as specified in rules or contractual arrangements, to terminate, suspend or restrict participation or continued provision of services where the firm fails to meet obligations or where safe and orderly FMI operations could be compromised (FSB 2017 Guidance, 1.1).

a) Under what conditions, if any, could safe and orderly FMI operations be at risk from maintaining participation of a service user in resolution?

OCC operates as a market utility and its ability to continue to provide safe and orderly clearing services is dependent upon the financial and operational stability of its Clearing Members. As such, OCC's Rules provide a mechanism to suspend a Clearing Member that enters into resolution.

The ways in which a Clearing Member in resolution could risk the safe and orderly operations of OCC's clearing service include, among other things, the failure to make any delivery of cash, securities or other property to the OCC in a timely manner, failure to make any delivery of funds or securities to another Clearing Member, and failure to make any delivery of funds or securities to a correspondent clearing corporation in a timely manner. These failures could ultimately lead to the mutualization of losses across Clearing Members, OCC's entry into recovery, or worst case, its entry into resolution.

b) Which indicators, if any, can a participant use to anticipate that such a scenario may occur?

As described above, OCC may suspend a Clearing Member that failed to meet its obligations to OCC or upon the occurrence of any other indicator set forth in Rule 1102.

13. Are there any further aspects or issues to mention in relation to the provisions for termination or suspension of membership? If possible, please provide concrete examples of specific factors that were considered in the past when assessing whether to exercise judgement to terminate or suspend a participant's access. Please elaborate.

No.

Part III: Prior to resolution, during signs of distress at the participant

The questions in this section assume a situation of stress, in which one of the FMI's (direct) participants/members, or an affiliate company, exhibits signs of distress. Please distinguish in case there are differences between situations of idiosyncratic vs. market stress.

To avoid duplication, respondents may cross-reference other answers when appropriate.

14. What management and monitoring process(es) does the FMI have in place to identify a situation of stress of a (direct) FMI participant or its affiliate?

Once Clearing Members are admitted, OCC monitors their ongoing creditworthiness. For example, pursuant to OCC's Rules, each Clearing Member is required to file monthly financial statements with OCC. The Clearing Member's financial condition is then evaluated in relation to predefined standards, which are reviewed annually by the Risk Committee. Clearing Members are also required to submit annual audited financial statements to OCC staff. These measures help ensure that OCC's Clearing Members have the financial resources necessary for safe and effective clearing operations.

OCC Rules provide for increased surveillance of Clearing Members with deteriorating financial condition through a variety of automated systems employed by OCC's risk management staff. These automated systems are based on general market conditions and the Clearing Member's exposure to market risk. First, OCC identifies those Clearing Members whose financial or operational condition has deteriorated over time by analyzing the trends in key financial ratios evidenced in monthly financial statements. OCC also identifies Clearing Members whose uncollateralized position risk exposures relative to capital prove excessive.

Additional information regarding the management and monitoring processes that OCC uses to identify stress situations is set forth in Principles 4, 18, and 19 of OCC's PFMI disclosures.

15. Which indicators does the FMI consider as part of its management and monitoring in order to determine whether its participants/members face difficulties due to idiosyncratic and/or market stress (outside of entry into resolution)?

The indicators that OCC considers as part of its monitoring are described in response to questions 8.d and 14 of this questionnaire and in Principle 6 of OCC's PFMI disclosures. As non-exhaustive examples, idiosyncratic risk is measured specifically through the stress scenarios mentioned in Principle 4, Key Consideration 4 and Principle 6, Key Consideration 3 of OCC's PFMI disclosures, and market stresses are measured by OCC's Portfolio Revaluation System and monitored for unrealized losses

exceeding 50% of all accounts total risk charge as described more fully in Principle 6, Key Consideration 4 of OCC's PFMI disclosures.

16. What risk mitigation actions could the FMI take under its rules / internal procedures vis-à-vis the participant or member? Which of those potential actions are likely, i.e. to be expected by the firm? How would risk mitigation vary in the event of mild, moderate, and severe stress situations at a participant/member? Could actions be taken even though the participant/member meets its obligations?

If necessary, OCC may take corrective action to mitigate the risk posed by a Clearing Member experiencing a stress event. Such corrective action may include higher margin requirements, reductions in the Clearing Member's positions, increased capital, or some combination of these actions. Principle 4, Key Consideration 2 of OCC's PFMI disclosures illustrates examples of OCC "watch level" criteria, whereby the detection of certain facts and circumstances suggesting the counterparty's deteriorating financial condition triggers enhanced surveillance requirements and/or business restrictions that OCC may impose pursuant to OCC Rule 305 (Restrictions on Certain Transactions, Positions and Activities). In addition, a Clearing Member whose net capital has dropped below a certain threshold or who has demonstrated an operational insufficiency will be placed on an elevated watch level and may become subject to an additional margin charge pursuant to OCC Rules 601 (Margin Requirements) and 609 (Intra-Day Margin). Typically, as the severity of the stress situation increases the penalties increase from operational implications (e.g., increased reporting frequency) to financial implications (e.g., increased margin requirement) to ultimately, suspension pursuant to OCC Rule 1102 (Suspension of a Clearing Member). Risk mitigation actions can be taken even if a Clearing Member meets its obligations.

17. What self-reporting requirements are placed on the member/participant in a situation of stress (e.g. additional reporting, increased reporting frequency; evidence of operational and financial capacity)? Please provide any templates or overviews of required data points, where available.

To effectively monitor Clearing Members with a deteriorating financial condition, OCC has a financial reporting requirement known as an "early warning" notice, which requires Clearing Members to promptly notify OCC of certain material adverse changes in financial condition, such as a decline in net capital below a specified threshold or increase in aggregate indebtedness above a specified threshold. OCC's "early warning" notice requirements are set forth in OCC Rule 303 (Early Warning Notice). For example, Clearing Members are required to notify OCC if they are required to notify, or receive notice from, any regulatory organization regarding any financial difficulty affecting the Clearing Member or of any failure by the Clearing Member to be in compliance with the financial responsibility rules or capital requirements of any regulatory organization. As noted in question 16 above, Clearing Members experiencing a stress event may be subject to an increased reporting frequency or required to

provide evidence of operational and financial capacity as part of enhanced surveillance by OCC.

18. Please explain the methodology used to calibrate additional membership requirements (including operational, financial and capital requirements) for a member/client in financial stress outside of resolution.

Additional membership requirements for a Clearing Member in financial stress are created on a case-by-case basis.

19. Please describe for each of the below risk mitigation actions, in as far as they form part of the FMI's set of potential risk mitigation actions: (i) whether these actions are discretionary or pre-determined, e.g., would the FMI follow a required set of actions, which may be described in its rule book; (ii) in which way, if at all, the FMI could deviate from the predetermined procedure so as to either disregard a mandated risk mitigation action or adopt a non-standard action?

i. Increasing membership contributions (e.g. default fund/loss sharing contributions), mandating pre-funding, restricting withdrawal of deposits;

OCC has several risk management tools that can be used mitigate the risk of a particular stress event, including increasing the size or cash component of the Clearing Fund and restricting withdrawals. Rule 1001 provides that the size of the Clearing Fund will be adjusted on a monthly basis and may be adjusted intra-month based on clear criteria set forth in this rule. Rule 1001(d) provides OCC with authority to temporarily increase the size of the Clearing Fund to protect OCC, Clearing Members or the general public.

Rule 1002 provides that OCC will periodically set a minimum Clearing Fund Cash Requirement based on an analysis of projected liquidity demands under a variety of stress scenarios. Under Rule 1002(b), OCC is permitted to temporarily increase the size of the Clearing Fund to protect OCC, Clearing Members or the general public.

Rule 608 allows OCC to reject any withdrawal of deposits request if it deems rejecting such request advisable for any of the reasons set forth in Rule 609.

ii. Increasing initial/variation margin/collateral requirements, restricting collateral types, removing cross-margining facilities; increasing liquidity obligations;

Rule 601(c) allows OCC to establish the margin requirement for any account or class of cleared contracts in an amount that it deems necessary or appropriate under the circumstances to protect Clearing Members, OCC and the general public. OCC Rules also provide that OCC may require Clearing Member's post intra-day margin (Rule 609) and/or satisfy all or part of its margin requirement with cash (OCC Rules 601(g), 604(g) and 609(b)). As provided in Article VI, Section 24 of OCC's By-Laws and Chapter VII of

OCC's Rules, cross-margin arrangements will remain in effect until the applicable Cross-Margin Account Agreement is terminated or until cross-margining arrangements are terminated by OCC or a Participating CCO.

iii. Removing credit lines, reliance on parental guarantees or securities borrowing facilities;

Not applicable.

iv. Enforcing trading controls including position limits, restricting markets;

As described more fully in Part II of this questionnaire, Rule 305 allows OCC to restrict transactions, positions and activities of a Clearing Member.

v. Termination or suspension of participation/membership.

As described more fully in Part II of this questionnaire, OCC Rule 1102 governs the suspension of a Clearing Member.

20. Please answer question 19 also for other risk mitigation actions, if any, that are not mentioned here and would likely be taken.

Not applicable.

21. In a situation of idiosyncratic or market stress, in which one of the FMI's (direct) participants/members, or an affiliate company, exhibits signs of distress, communications and notifications may be necessary. Please distinguish in the below in case there are differences between a situation of idiosyncratic vs. market stress.

a) What notifications or communications would the FMI undertake to the participant/member, their competent and/or resolution authority, the FMI's competent and/or resolution authority, the stressed firm's settlement agent, and other stakeholders, and when? Would any of these be based on an obligation for the FMI to notify?

OCC will advise the suspended Clearing Member, other Clearing Members, and appropriate regulatory authorities (including other self-regulatory organizations) when it has suspended a Clearing Member. See OCC Rule 1103 and the response to question 11.d of this questionnaire.

b) Do you have a specific communication plan for this, or does your approach leverage existing crisis communication mechanisms? In both cases, please describe the main features of the approach.

OCC has adopted a procedure for drafting and distributing notices to the suspended Clearing Member, other Clearing Members, and appropriate regulatory authorities, including applicable self-regulatory organizations.

c) Does the FMI need to get consent from the firm or inform the firm prior to a notification or communication?

No.

d) Do the communication/notification protocols require specific factors to be considered, for example legal implication, market impact, etc.?

Rule 1103 provides the minimum requirements for the notice of a Clearing Member suspension.

e) Are your communication protocols standardised across participants or do they take into account the specificities of firms' participation and roles in respect of the FMI?

OCC's communication protocols account for certain aspects of a Clearing Member's participation, such as notifying applicable self-regulatory organizations.

22. Alleviating uncertainty for the FMI.

a) Which actions could the firm or the relevant authorities take in order to alleviate uncertainty for the FMI, and reduce the risk that the FMI may take risk mitigation actions that may have an adverse financial impact on the firm?

The firm could provide transparency into the remedial actions that they are taking and relevant authorities could provide a holistic view of the firm across CCPs and the market.

b) Which data / quantitative information and what qualitative information might you need to receive from the participant and/or RA in order to allow the participant to maintain access (please consider the three levels of access mentioned in footnote 3)? Please specify by when you would need each piece of information, if appropriate.

Clearing Member's should comply with all financial and operational obligations outlined in OCC's Rules and By-Laws, and any additional requirements that are imposed. Even if a Clearing member provides OCC with all of the required information, the Board of Directors or a Designated Officer may summarily suspend any Clearing Member which is in such financial or operating difficulty that the Board of Directors or a Designated Officer determines and so notifies the appropriate regulatory agencies that suspension is necessary for the protection of OCC, other Clearing Members, or the general public.

c) What other actions could be taken ex-ante to avoid a temporary interruption of services or the risk of some transactions remaining unexecuted?

See the response to question 22.b above.

d) Please discuss any other considerations.

Not applicable.

23. Considering adverse financial impact of FMI risk mitigation actions on direct/indirect participants.

a) Some actions, designed to protect the FMI, may precipitate the failure of the relevant participant/member or worsen its position at the time of resolution. How does the FMI consider this when deciding to protect itself?

In liquidating a suspended Clearing Member's positions, OCC's Rules provide OCC with discretion to delay a liquidation to account for prevailing market conditions, the potential effects of liquidating transactions and other relevant circumstances. This discretion allows OCC to address a situation in which immediate liquidation is not in the best interest of OCC, other Clearing Members or the general public.

b) Does the FMI take into account the impact on indirect participants of actions taken in response to a direct participant/member facing financial stress?

Yes, see question 23.a above.

24. Possible differences in treatment of domestic and foreign FMI service users entering into resolution.

a) Do you differentiate in your treatment of domestic and foreign FMI service users, and if so in what way?

No.

b) Among foreign users, is there a distinction for users from certain jurisdictions? If so, what are those distinctions?

None.

25. Safeguards in jurisdictional legal frameworks.

a) How do you assess whether the resolution framework of the jurisdiction in which a firm resides provides adequate safeguards to the provider of critical FMI services?⁶

⁶ See FSB, *Principles for Cross-border Effectiveness of Resolution Actions* 2015 (November).

OCC assesses the impact of the resolution frameworks for the relevant jurisdictions, primarily by working with local counsel to obtain guidance addressing the enforceability of OCC's Rules related to close-out netting (see, e.g., Chapter XI of OCC's Rules and OCC Rule 707).

b) From which regulatory regimes (e.g. countries) do you accept service users?

OCC Clearing Members are currently domiciled in the U.S. and Canada.

26. Are there any further aspects or issues to mention in relation to interaction between the FMI and a participant in financial stress? Do you have any examples of past experiences where the FMI has utilised its powers in relation to a member undergoing stress? What actions were undertaken and what were the outcomes? Could this example be indicative of actions that may be taken in a future case?

No.

Part IV: During and after resolution

To avoid duplication, respondents may cross-reference other answers when appropriate.

27. When the FMI becomes aware of a participant entering a resolution process, which actions would the FMI be likely to take vis-à-vis the participant? Could actions be taken even though the participant/member meets its obligations?

OCC Rule 1101 provides that a Clearing Member must immediately notify OCC if it is unable to meet its obligations, is insolvent, or becomes the subject of a bankruptcy petition, receivership proceeding or the equivalent. Such notice may result in a suspension under Rule 1102, which allows OCC to suspend a Clearing Member that is in such financial or operating difficulty that the Board of Directors or a Designated Officer determines that suspension is necessary for the protection of OCC, other Clearing Members, or the general public. Assuming a Clearing Member entering resolution continued to meet its obligations to OCC, the permissive nature of Rule 1102 allows, but does not require, OCC to suspend the Clearing Member. If a Clearing Member entering resolution was not suspended, OCC would expect to receive regular communications regarding the Clearing Member and could impose restrictions on the Clearing Member's transactions, position and activities in accordance with OCC Rule 305.

28. Please explain the methodology used to calibrate additional membership requirements (including operational, financial and capital requirements) for a member/client in resolution. To what extent does the FMI take into account the resolution strategy and tools applied to a member to determine their financial and operational requirements? Does the FMI consider anything specific in its methodology in relation to ring-fenced or specifically safeguarded entities?

See question 19 above.

29. Please describe for each of the below risk mitigation actions, in as far as they form part of the FMI's set of risk mitigation actions upon a participant entering a resolution process (in addition to actions that would be taken prior to resolution): (i) whether these actions are discretionary or pre-determined, e.g., would the FMI follow a required set of actions, which may be described in its rule book; (ii) in which way, if at all, the FMI could deviate from the predetermined procedure so as to either disregard a mandated risk mitigation action or adopt a non-standard action; (iii) how/when the following risk mitigation actions would be communicated to the participant.

i. Temporary suspension of certain activities (and if so, which activities);

As described for fully in response to question 8, OCC Rule 305 describes OCC's process for restricting the transactions, positions and activities of a Clearing Member.

OCC Rule 305(a) allows OCC's Board of Directors or a Designated Officer to exercise judgement in suspending a clearing member. Such determinations are subject to a review process. See, e.g., OCC Rules 305(c).

ii. Potential requirements to contribute additional margin or amounts to default or guarantee funds, secure additional liquidity commitments (including on an intra-day basis), or to pre-fund part or all of payment and settlement obligations;

Information related to OCC's ability to establish additional margin requirements, Clearing Fund contributions, or the other requirements to mitigate the risk of a Clearing Member in resolution are described in response to question 19.

iii. Potential changes to operational or information requirements, including those needed because certain services might not be available;

OCC Rule 306 indicates the reporting requirements of Clearing Members and that OCC may require any Clearing Member at any time to make more frequent net capital computations or to file with the Corporation the required reports on a more frequent basis or such other reports or financial statements in such form or detail as may be prescribed by OCC, including for purposes of assessing whether the Clearing Member is meeting the financial requirements for clearing membership on an ongoing basis.

iv. Potential requirements that may apply in relation to a bridge institution or a third party purchaser to which functions have been transferred.

OCC Clearing Membership is non-transferable. If a broker-dealer (or other acceptable registered entity per OCC rules) is purchased, in whole or in part, the purchasing entity must apply for a new membership or a business expansion if the entity was not a current Clearing Member with the applicable product approvals.

OCC can, however, expedite the approval of a new Clearing Member if all required information has been provided by the purchasing entity. In the event that expedited treatment is requested for an application, the Chief Executive Officer, Chief Operating Officer, or any delegate of such officer, shall have the authority to approve or disapprove such application on a temporary basis.

30. Please answer question 29 also for other risk mitigation actions, if any, that are not mentioned here and that would likely be taken.

Not applicable.

31. In what way should a service user prepare for resolution-related risk mitigation measures by the FMI to maximise the likelihood of maintaining access? Does the FMI provide any documented guidance on this to its participants/members, and/or to their RAs?

Engage in a dialogue with OCC staff, in advance of entering resolution, where possible, continue to meet obligations to OCC and comply with any additional requirements imposed.

32. What impact would a member/ participant's resolution have on any parent or subsidiary's direct membership at the FMI?

A parent or affiliate entering resolution would not necessarily trigger the suspension of a Clearing Member that continued to meet its obligations to OCC but could be indicative of financial difficulty that may result in a suspension under Rule 1102.

33. In a situation of idiosyncratic or market stress in which one of the FMI's (direct) participants/members, or an affiliate company, enters resolution, communications and notifications may be necessary. Please distinguish in the below in case there are differences between a situation of idiosyncratic vs. market stress.

a) What notifications or communications would the FMI undertake to the participant/member, their competent and/or resolution authority, the FMI's competent and/or resolution authority, the firm's settlement agent, and other stakeholders, and when? Would any of these be based on an obligation for the FMI to notify?

OCC would be in communication with the Clearing Member as well as its regulator and/or resolution authorities regarding the overall wherewithal of the member. OCC would also be in touch with its own regulators to keep them advised on the situation. See *also* questions 11.d and 21.a.

b) Do you have a specific communications plan for this or does your approach leverage existing crisis communication mechanisms?

OCC has a specific communications plan if a Clearing Member defaults or is suspended.

c) Does the FMI need to get consent from the firm or inform the firm prior to a notification or communication?

No.

d) Do the communication/notification protocols require specific factors to be considered, for example legal implication, market impact, etc.?

Upon the suspension of a Clearing Member, Rule 1103 provides that OCC will notify all Clearing Members of the suspension. Such notice shall state, in general terms, how

pending transactions, open positions, stock loan and borrow positions, exercised option contracts, matured futures and other pending matters will be affected and what steps are to be taken in connection therewith.

e) Are your communication protocols standardised across participants or do they take into account the specificities of firms' participation and roles in respect of the FMI?

The communication protocols are consistent for all Clearing Members and account for certain aspects of a Clearing Member's participation, such as notifying applicable self-regulatory organizations.

f) Would your members / clients be able to leverage any preparations your organisation has undertaken to access the necessary communication infrastructure to deliver the increased extent of communications that may be needed to respond to a resolution and any restructuring of a member/ client (such as increased call volumes to call centres)?

OCC has constant communication with Clearing Members including a website, email broadcasts and call center. We would continue to utilize this existing infrastructure to communicate with our members.

Upon the suspension of a Clearing Member, Rule 1103 provides that OCC will notify all Clearing Members of the suspension.

g) What management and monitoring arrangements would apply for these crisis communications and notifications? Would you have a dedicated team or a point of contact for receiving and initiating all communications that relate to a member/ client entity in resolution or any related restructuring?

OCC would put together a dedicated team including Senior Management, Corporate Communications, Financial Risk Management, Business Operations, Government Relations, and Legal to manage and monitor the communications related to a member in resolution.

34. Alleviating uncertainty for the FMI. (As requested in Part II, if the responses to sub-questions a.-f. below have been documented in rulebook/contractual provisions or other documents, please reference.)

a) What actions (such as communication) could the participant or authorities take in order to alleviate uncertainty for the FMI about the participant's situation, and thereby reduce the risk that the FMI may take risk mitigation actions that may have a further adverse financial impact on the participant?

See question 22.a.

b) Assuming that the authorities and the affected member/ client may not be able to share relevant information before the commencement of the resolution process, would that represent a material issue that could determine how your organisation responds to the fact that a member/ client has been placed in resolution?

Yes, if a Clearing Member knew they were entering the resolution process, but relevant information was not shared with OCC, it may increase the likelihood of OCC suspending the Clearing Member pursuant to Rule 1102.

c) Which data / quantitative information would the FMI need to receive from the participant and/or RA in order to allow the participant to maintain access (please consider the three levels of access mentioned in footnote 3)? Please specify by when you would need each piece of information, if appropriate, including when you would need to be informed prior to resolution measures.

See question 22.b.

d) Which qualitative information would the FMI need to receive from the participant and/or RA in order to allow the participant to maintain access to the FMI? Please specify by when you would need each piece of information, if appropriate, including when you would need to be informed prior to resolution measures.

See question 22.b.

e) What other actions could be taken ex-ante to avoid a temporary interruption of services or the risk of some transactions remaining unexecuted?

See question 22.b.

f) Please discuss any other considerations.

Not applicable.

35. Considering adverse financial impact of FMI risk mitigation actions on direct/indirect participants.

a) Some actions, designed to protect the FMI, may worsen the position of the participant at the time of resolution and as a result may also affect other participants. How does the FMI consider this when deciding to protect itself?

In liquidating a suspended Clearing Member's positions, OCC's Rules provide OCC with discretion to delay a liquidation to account for prevailing market conditions, the potential effects of liquidating transactions and other relevant circumstances. This discretion

allows OCC to address a situation in which immediate liquidation is not in the best interest of OCC, other Clearing Members or the general public.

b) Does the FMI take into account the impact on indirect participants of actions taken in response to a direct participant/member entering into resolution?

See question 35.a.

36. FMI rules and contractual arrangements should allow a bridge institution to maintain its predecessor's participation (membership) during a resolution process (FSB 2017 Guidance, 1.1). (As requested in Part II, if the responses to the sub-questions below have been documented in rulebook/contractual provisions or other documents, please reference.)

a) Please explain how the FMI rules, contractual arrangements and/or procedures reflect this.

OCC clearing membership is non-transferable. If a broker-dealer (or other acceptable registered entity per OCC rules) is purchased, in whole or in part, the purchasing entity must apply for a new membership or a business expansion if the entity was not a current Clearing Member with the applicable product approvals.

b) What would be the FMI's process to ensure that continuity of access can be maintained for the purchaser of a resolved entity or for a bridge institution?

OCC can expedite the approval of a new clearing membership if all required information has been provided by the purchasing entity. In the event that expedited treatment is requested for an application, the Chief Executive Officer, Chief Operating Officer, or any delegate of such officer, shall have the authority to approve or disapprove such application on a temporary basis.

c) Please share any timelines and any external dependencies for this process.

The timeline to establish a new Clearing Membership would be dependent on the relevant facts and circumstances, including the timely receipt of any and all required information and documents.

d) If the purchaser or bridge institution requires a new access, do you have a "fast-track" procedure to allow access for such a purchaser or bridge institution? How long is setting up access expected to take (with or without a "fast-track" procedure)? What would the FMI require in order to continue providing the service pending completion of the onboarding procedure (e.g. connectivity and BIC/SWIFT codes to remain unchanged)?

Yes, see question 36.b. OCC has the ability to set up access to our ENCORE system along with SFTP connectivity, which is needed to send and receive files. This could occur quickly. Real-time access could also proceed quickly if the purchaser or bridge institution takes over the existing dedicated line to OCC. It may take a little longer if it has to order a new line.

e) What type of information is needed in the context of a change-of-control assessment, i.e. to accept a purchaser or bridge institution as a participant/member? Please specify by when you would need each piece of information, if appropriate. How long would you then need to take an informed decision on access for the purchaser or bridge institution?

Article V of OCC's By-Laws describe OCC's standards for registration, regulatory authorization, capital, operational capability, and experience and competence.

f) Does the FMI explicitly consider, in its rulebooks or internal procedures, the possibility of a RA requiring access for the purchaser or bridge institution even in case they do not meet the membership or participation criteria (for instance where a credit rating is required)?

No.

g) Please discuss any other, e.g. practical, considerations around continuity of FMI access of a bridge institution or of a purchaser.

Not applicable.

37. FMIs should consider the operational, technological, financial and legal implications arising from the transfer of functions or positions to a successor (either a bridge institution or a third-party purchaser). (FSB 2017 Guidance, 1.4)

a) What preparations are necessary in your circumstances for such a transfer to be successful? What changes would be necessary for such a transfer to be successful? Please consider any preparations and changes by the FMI as well as by FMI members/service providers/others.

OCC clearing membership is non-transferable. If a broker-dealer (or other acceptable registered entity per OCC rules) is purchased, in whole or in part, the purchasing entity must apply for a new membership or a business expansion if the entity was not a current Clearing Member with the applicable product approvals.

OCC can, however, expedite the approval of a new Clearing Member if all required information has been provided by the purchasing entity. In the event that expedited treatment is requested for an application, the Chief Executive Officer, Chief Operating Officer, or any delegate of such officer, shall have the authority to approve or disapprove such application on a temporary basis.

38. Portability/Transferability of underlying client positions, for example to facilitate a bridge or partial transfer resolution strategy.

a) For CCPs: Which kind of segregated accounts are offered to (underlying) clients to facilitate the portability/transferability of client positions and securities collateral? Do you envisage that there may be material barriers to the effective and timely transfer of client positions following a decision to transfer the activities of the member in resolution to another member? If so, please explain.

Rules 1104 and 1106 contemplate the transfer of positions to a non-defaulting Clearing Member. OCC will use commercially reasonable efforts attempt to port positions, where appropriate. For the protection of non-defaulting Clearing Members, the markets cleared by OCC and the public, in the event of a Clearing Member default, OCC retains the right to promptly liquidate all of the positions of the defaulting Clearing Member to return OCC to a matched book.

b) For ICSDs: Do you offer segregated accounts to (underlying) clients? Do you envisage that there may be material barriers to the effective and timely transfer of client securities and cash to another custodian following a decision to transfer the activities of the participant in resolution to another participant? If so, please explain.

Not applicable.

39. Are there any further aspects or issues to mention in relation to interaction between the FMI and the participant during or after resolution of the participant?

No.

Part V: Arrangements and operational processes to facilitate continued access in resolution

40. The FMI should consider establishing management, monitoring and operational rules and procedures that facilitate the ability of FMI management to make prompt decisions in response to a service user's resolution (including a period when the FMI is closed for business). (FSB 2017 Guidance, 1.4)

a) What is the process that the FMI typically follows to identify, escalate, and come to a final decision on issues related to (i) the financial condition of a member, (ii) the performance or lack of performance by a member of its obligations under the FMI's rulebook, and/or (iii) the continuing membership of a member?

OCC has cross-functional monitoring processes established to identify and escalate financial and operational issues related to a member. Ultimately, these are either escalated to the Office of the Chief Executive Officer in order to consider appropriate protective measures or the Head of Default Management to consider suspension.

b) What positions, committees, or decision-making bodies in the FMI's organisation have a role in each phase of the identification, escalation, and final decision-making process?

The relevant decision-making body varies based on the provisions of OCC's By-Laws, Rules, policies and procedures.

c) What procedures are in place to facilitate prompt decision making at any time? What, if any, are the limitations?

OCC has procedures to arrange ad hoc meetings of, or voting emails to, internal committees and working groups to make prompt decisions; otherwise, the Chair of such committee or working group and the management executive in charge of that committee or working group can decide on what actions to take (with subsequent reporting to the committee).

d) What would be the likely range of decisions undertaken after receiving notice of a service user entering into resolution? What market communications or notifications to the regulator would be undertaken?

First, OCC would need information to determine the potential impact resolution would have on the member's standing at OCC. If necessary or appropriate, OCC's could impose protective measures, including information requests, increased financial reporting, additional margin charges, business restrictions, or suspension. OCC would notify its regulators in accordance with applicable requirements.

41. In line with the Key Attributes,13 FMIs should regularly test the effectiveness of their relevant rules, contractual arrangements and procedures in responding to a resolution scenario of a participant.

a) How do you test these contingency arrangements? How do you take participants in resolution into account in those contingency arrangements?

OCC regularly tests the default of a Clearing Member, as well as the drawing on of OCC's committed liquidity resources. In addition, OCC performs Scenario Analysis Workshops, which simulate the disruption of linked FMIs and the actions OCC would take. The default tests and scenario analyses that OCC performs simulate the failure of a Clearing Member or linked FMI to meet its obligations to OCC, which very well could accompany resolution of those entities.

b) How do your rules facilitate the transfer of positions of a client of a service user in resolution to another service user of the FMI, as applicable?

See question 38.a.

42. How do you test members' readiness of arrangements for meeting increased information and communication requests (beyond those required in BAU) that will be needed prior to and during resolution? Which disclosures do you require from members in this regard?

OCC does not test Clearing Members' readiness for meeting increases in information or communication requests.

43. Please describe any simulation exercises the FMI has held with relevance to continuity of access. Please share examples of scenarios covered and whether such scenarios have been inspired by actual crisis events, and clarify the points below:

a) Key Objectives/ how it correlates to a real life scenario;

OCC Business Continuity Procedure states that Disaster Recovery/Business Continuity ("DR/BC") testing is performed at least once quarterly. Historically, OCC conducts ten to twelve DR/BC tests annually.

OCC's Business Continuity team coordinates several tests including:

- Testing of OCC's Emergency Notification System
- The Business Continuity team schedules one test or exercise per quarter and includes scenarios related to identified threats, vulnerabilities, or risk identified in its risk assessment such as a cyberattack, pandemic.

The Production team conducts Disaster Recovery Tests

OCC maintains a disaster recovery testing program that is designed to ensure it can recover and resume processing after a disaster event. OCC's target recovery time objective for core clearing, settlement and reporting architecture is two hours or less. Disaster Recovery (DR) Test scenarios try to simulate every core clearing process. OCC runs systems from Start of Day to End of Day. These are broken down to 3 shift periods to get the actual business users involved to run these tasks.

b) Frequency;

Business DR tests are run at least once per quarter. Technical Shakeout DR test of architecture or third-party software will take place as well when significant changes are applied to production / DR systems. These tests are typically carried out within one month of the change.

c) Involvement of (large) FMI participants and whether any FMI participants have performed a simulation on their side in parallel;

OCC participates with the industry tests run by the Securities Industry and Financial Markets Association and the Futures Industry Association annually. This critical exercise, involving around 100 securities firms and 80 other organizations, highlighted the industry's ability to operate through a significant emergency using backup sites, recovery facilities and backup communication capabilities and combined large-scale connectivity testing with the annual test program.

d) Involvement of authorities: competent authorities of the FMI, competent authorities of participants, and RAs; and

Not applicable.

e) Lessons Learned.

Each test is documented and if incidents are found they are documented and remediated in the same manner as any production issue.

44. Are there any further aspects or issues to mention in relation to arrangements and operational processes to facilitate continued access in resolution?

No.